

# THE DENTAL DIGEST



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# THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., EDITOR

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## OUR COVER THIS MONTH

Caves and tunnels, as visiting places for Cook's tourists and other rambling curiosity seekers, received a bad jolt during the past year. We all remember the Kentucky cave tragedy of a few months ago, a part of which "closed down" on its victim, holding him fast until he died, in spite of all the ingenuity and hard rescue work that both State and Federal assistance could render. There is little assurance of safety in exploring these natural subterranean labyrinths. Experienced guides should take you in if you hope to come out again.

Our COVER PICTURE shows the entrance to what is known as The Natural Tunnel, located in Scott County, Virginia. It is an opening cut by water through the limestone base of the mountain where situated. It is 1000 feet in length, 75 feet wide, 100 feet high at the western entrance, and 60 feet high at the eastern entrance. This happens to be one of the safe natural tunnels of the world, as a railroad has been built through it, its care and maintenance being well looked after at all times.

# Ancient Egypt

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Dentistry and Cabinet Design.



American Dental Cabinet No. 120

There was the day of elaborate gold and silver ornaments and furniture, but real beauty is simple and unostentatious like American Cabinet No. 120.

They spent a great deal of time embalming the dead, but little in lengthening the span of human life.

American Cabinet No. 120 with its white glass medicine closets, aseptic opalite working surface, and steel drawers with white Pyralin finish and wood fronts, has done its part in making modern dentistry a wonderful science of incalculable benefit to present and future civilization.

Have you our catalog?  
If not why not

The American Cabinet Co.  
Two Rivers, Wis.



# THE DENTAL DIGEST

Vol. XXXI

JULY, 1925

No. 7

## Orthodontia for the General Practitioner

By Percy Norman Williams, D.D.S., New York, N. Y.

This subject has been written about and discussed at conventions until it may seem to be pretty well worn out, but I wish to take it up from a little different standpoint and try to arrive at some conclusions which may be helpful to the operator who may not feel capable of taking up orthodontia as a specialty, but who yet feels called upon to render services to that class of patients who may be remote from large centers of population or who, because of financial reasons, are unable to consult a specialist.

The general practitioner is hardly justified in declining to take simple cases which are greatly in need of treatment because he may not be interested in orthodontia or finds himself so concerned with other branches of the profession that he has no time for this kind of work. We must fulfill what we cannot help regarding as moral obligations to our patients. If it becomes possible for us to acquire knowledge whereby we may be able to treat simple cases, we should certainly feel it our duty to do so. We cannot all of us become specialists, but we can acquire ability to treat simple cases successfully.

There is a class of patients which can be greatly benefited by simple lines of treatment. This class includes children with restricted breathing through the nose, due chiefly to a very narrow upper arch, causing the roof of the mouth to push up into the floor of the nose and deflect the septum, as well as restricting the area for the passage of air through the nose.

The relation of the mandible to the maxilla in these cases may be normal, the arrangement of the lower teeth may approximate normal, but the arrested growth in the upper jaw is a serious condition which, if possible, should be corrected. Treating cases of this type does not necessarily involve years of treatment with ideal occlusion as the goal.

I am aware of the fact that I may be criticized for saying that no case should be undertaken and treatment stopped short of attaining normal occlusion, but if we bring about a greatly increased efficiency in mastication and a normal area for the passage of air through the nose, and approximate a normal outline to the upper arch, and conditions are favorable for retaining such a result, we should feel entirely

justified in undertaking treatment, especially in view of the improvement in general health which usually follows such treatment.

Please bear in mind that I strongly discourage the general practitioner's undertaking any case but one requiring simple expansion and perhaps a slight adjustment in the alignment of the teeth, and these should be confined to what Angle speaks of as Class One, which means those cases having the mandible and lower arch approximately normal in their relation to the upper jaw.

One thing which has made orthodontia so distasteful to the general practitioner is the undertaking of cases which are difficult and require the attention of the specialist. The general practitioner should be fully aware of his limitations. He should be extremely careful in selecting cases and not begin a case that he does not feel entirely confident he can finish. He should not look upon declining to take a case as a reflection in any way upon his ability.

Many men have consulted me about cases which they had been carrying on for three or four years, and these cases were little better than at the beginning of treatment. Most of these cases were altogether too difficult for the general practitioner, who at best is apt to consider them as a sort of side issue. They have become disgusted with their results and are looking for the easiest solution of the problem.

This is an unfortunate state of affairs and is due largely to two factors. First, the general practitioner does not use sufficient care in selecting the type of cases he will accept. Second, he is unaware of the difficulties attending the care of orthodontic cases and is too often indifferent to suggestions and help from specialists.

Diagnosis and technic are becoming more and more standardized in the realm of orthodontia, and this is a hopeful outlook for the general practitioner whose mind has been confused by the large variety of appliances, the lack of any standardization in diagnosis and the temptation to heed the advice of the large number of laboratories making orthodontic appliances. Nothing can so destroy the confidence of the general practitioner in his own ability and do a greater injustice to his patients than to accept as a fact the mistaken idea that the appliance will work automatically.

One word concerning laboratories offering advice! One of our well-known orthodontists has this to say about laboratories: "The business of the manufacturer of a regulating appliance is to sell that appliance, hence the luring advertisements appealing to the greed of the dentists. He never forgets to emphasize the supposed ease with which malocclusions of the teeth may be corrected, through the use of that appliance. One manufacturer of regulating appliances states that the . . . 'method of correction enables every practitioner to approach malocclusion confidently. It is simple, safe, easily under-

stood and profitable. With an hour's study you can fit yourself for your first case. We furnish a removable appliance fitted for each case, and all you have to do is regulate the appliance as the case develops. Could anything be more misleading? Could we think of anything better calculated to draw the dollars from the pockets of the dentists who are in ignorance of the science of orthodontia and fill the coffers of the manufacturers?"

The laboratories which offer such misleading advertisements would find a less fertile field for their wares if the dental practitioner would go to the right source for information regarding orthodontic treatment. The etiology of malocclusion, the diagnosis, the selection of appliances and methods of treatment are largely ignored, even if known, by these misguided men who try to give absent treatment.

A careful, painstaking diagnosis is absolutely necessary before treatment can be intelligently undertaken. The general practitioner certainly needs such a diagnosis; if he cannot make it himself, he should consult a specialist, not a laboratory.

It has been my experience that the general practitioner possesses sufficient technical ability to carry on simple cases if he will but avail himself of the opportunities for acquiring knowledge of a few of the fundamental principles governing the use of appliances. Technic is of little importance where a case has been improperly diagnosed, or not diagnosed at all.

Consider the history of the development of medicine and dentistry. There have never occurred any new methods of diagnosis in which a method of technic could not be worked out to accomplish the desired results.

Let us go back to the discovery of gold foil as a filling material. It was necessary that the tooth should be kept perfectly dry. The rubber dam was discovered and fulfilled this need.

Until Lister discovered the theory of infection, saliva and food debris were allowed to enter root canals. The canals were not sterilized or treated in the way they are at the present time. Germicides, oxidizing agents, x-ray, ionization, all have followed as a matter of course the improved methods of diagnosis in root-canal work.

Many years ago, before a method was devised for diagnosing appendicitis, there was no technic for appendectomy. Once it was discovered that an inflamed appendix was the cause of innumerable deaths, a method of technic was forthcoming.

In the field of orthodontia there has been no greater need than that of diagnosis. We are still groping around for accurate, definite and comprehensive methods of diagnosis. Strange as it may seem, there is not at the present time an agreement upon the shape of the upper arch. It is to be greatly regretted that in a field which is so fast becoming an important specialty we have no really scientific method of

determining the relation of the teeth to points external on the surface of the skull. The best that we can do at the present time is to consider the teeth in relation to themselves. This certainly is very unsatisfactory. However, I do not believe that the day is far distant when we shall be able to measure carefully the relation of the teeth to the skull and determine the normal position every tooth in the arch should occupy.

I am going to suggest a method of determining the shape of the arch which I hope will be found helpful. I don't want it to be understood that what I shall say is to be considered as a hard and fast rule. There are all kinds of shapes and arches as there are all kinds and shapes of teeth, but if you will bear in mind that an arch must be large enough to accommodate the teeth, you will grasp the first fundamental in diagnosis.

Teeth are crowded, overlapping and irregular because there has been arrested growth in the alveolar process. If we can find out in

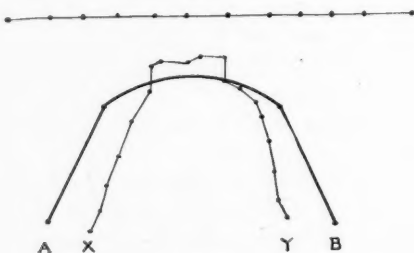


Fig. 1

Lines AB and XY are the same length and represent the combined diameters of the teeth.

what part of the arch arrested growth occurs and can stimulate growth in that part, we may restore the shape of the arch to normal and bring about masticating efficiency.

Teeth overlap and protrude because they have no other place to go. They take the line of least resistance. We shall demonstrate this with the following procedure:

Select a narrow upper arch with the anteriors protruding; take a sheet of pink baseplate wax, warm, and press over the occlusal surfaces of all the teeth. Lay this wax impression on a sheet of plain paper, and with a heavy pin prick through the imprint of the buccal cusps and incisal edges as shown in the wax. With a pencil connect the points thus pricked and we have an outline of the upper arch. With a pair of dividers measure the mesio-distal diameters of all the teeth in the following manner. Draw a straight line on a sheet of paper (Fig. 1), measure the diameter of the upper right first molar, and

prick the measurement on the line. Take the diameter of the second bicuspid and add this to the measurement of the molar. Take the diameters of the remaining teeth around to and including the left first molar. Take a piece of soft copper wire, 16-gauge, cut it in length to represent the combined diameters of the teeth as indicated on the measurement line. This wire represents the size of the upper arch; shape it to what you think should be the normal outline of the arch, place it over the diagram showing the original shape, and observe the movement necessary to place the teeth in their normal positions. (Fig. 1.)

From an assortment of artificial teeth select a tooth which exactly corresponds in size mesio-distally to each of the natural teeth measured. Secure a plain line articulator and two edentulous models or roughly shape up some from soft plaster; over the upper shape a piece of base-plate wax and arrange the upper teeth in an outline which you think approximates normal; attach the upper model, with the teeth, to the articulator and set up lowers to occlude.

If it is true that a plan must be conceived before it can be executed, then before a case of malocclusion can be treated, some idea of the arrangement of the teeth must be present in the mind of the operator. This mental image of the outline of the arch may be an image of the normal or the abnormal.

If we have depended upon our observation of arches that we have seen in the dental chair during our years of dental practice, we have a decidedly distorted image of what constitutes a normal arch. I would suggest that you consult any book on anatomy available and acquire all knowledge possible on the outline of the arch. Bear in mind that in the arrangement of the teeth on the wax we are simply arriving at a step in the diagnosis which will enable us to determine the positions the teeth should occupy in the mouth. You will find this arrangement of the teeth in the wax of the greatest help. Not only does it give you the dimensions of the arch, but also it stamps a mental picture which you will find helpful all through treatment.

If you have any doubt about the normal arrangement of the teeth in the wax, consult some one who you think knows a little more about it than you do. Take all the time necessary for determining just the movement of every tooth. The fact that you may spend a week or ten days on the diagnosis will indicate simply that before the treatment is undertaken, you are going to be sure of just what you expect to do. The old slogan, "Be sure you are right and then go ahead," is applicable in your case.

Now, assuming that we have arrived at a definite arrangement of teeth in the wax, the next step is to take plaster impressions of the upper and lower teeth which we have thus arranged in the wax. This

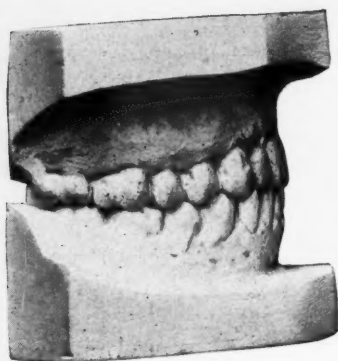


Fig. 2



Fig. 3

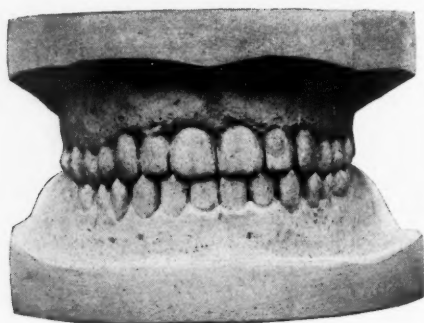


Fig. 4



Fig. 5

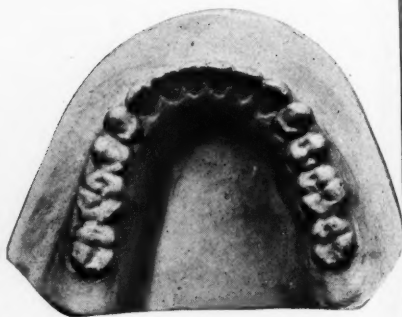


Fig. 6

is a simple operation and requires very little time. Pour the casts, smooth and carefully trim. We have now a fairly accurate and most helpful guide for treating the natural teeth. Figures 2 to 6 show models made by this method.

40 East 41st Street.

(To be continued)

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## American Dental Association

SIXTY-SEVENTH ANNUAL SESSION, LOUISVILLE, KENTUCKY

SEPTEMBER 21, 22, 23, 24, 25, 1925

### OFFICIAL CALL

*To the Officers, Members and Constituent Societies of the American Dental Association—*

You are hereby notified that the Sixty-seventh Annual Session of the American Dental Association will be held at Louisville, Ky., Sept. 21-25, 1925.

The House of Delegates will convene at 10:00 o'clock in the forenoon and 2:30 o'clock in the afternoon, Monday, September 21, in the Lounge Room, Kosair Temple. The third and fourth meetings of the House of Delegates will be held Wednesday and Thursday, September 23 and 24, at 2:30 o'clock in the Ball Room, Brown Hotel.

The general meeting, which constitutes the opening exercises of the Session, will be held Tuesday, September 22, at 9:40 a. m. in the Ball Room, Brown Hotel, and general meetings will be held at 8:00 p. m. on that and subsequent days of the Session.

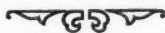
The various sections of the American Dental Association will meet Tuesday, September 22, at 2:00 p. m., and thereafter according to their respective programs.

The Registration Department will be open from 8:30 a. m. until 5:00 p. m., Monday, Tuesday, Wednesday and Thursday, September 21, 22, 23 and 24, and from 8:30 a. m. to 10:00 a. m., Friday, September 25, in the Main Lobby, East Entrance, Kosair Temple.

The constituent societies are hereby notified to file with the General Secretary of this Association, at least thirty (30) days prior to the first day of said Annual Session, a list of the names and addresses of their delegates and alternates.

C. N. JOHNSON, *President*,

OTTO U. KING, *General Secretary*.





## Reproducing Individual Teeth in Porcelain for Prosthetic Restorations

By M. M. House, D.D.S., Deaner Institute, Kansas City, Mo.

For a number of years the writer has been engaged in studies and experiments for reproducing in porcelain the natural teeth of patients who need artificial dentures. Many visitors to the office have been shown the various stages of the work as it has progressed, and some have been keenly interested in the thought that this work might become possible to individual prosthetists. Inquiries as to the possibility and practicability of this work are frequently received, and the purpose of this article is not only to answer these letters but to afford information to others who may be interested in this subject.

The apparatus required in the first stage of reproducing natural teeth is neither new nor expensive. Some form of pantograph is required, such as has been in use in many trades for years past. Such a machine should be obtainable at a cost of perhaps \$50.00 or \$75.00.

The application of the pantograph to the reproduction of teeth proves much more difficult in practice than it is in theory. It is not especially difficult to reproduce one dimension of a tooth with reasonable accuracy, for instance, the length. In our work it is necessary to reproduce the length, the width and the thickness correctly. It is difficult to reproduce the length and the width at the same time, and efforts to reproduce length, width and thickness have rarely been successful.

A good deal of difficulty is being met with at present in making satisfactory dies, especially for teeth which present undercuts, and these are often essential to the reproduction of form in a tooth, the purpose for which the work is done. Many times several hours are spent in efforts to get a satisfactory die of a single tooth, and for some teeth such dies cannot be made without great expense.

The only furnace available at present for baking such teeth is an electric furnace. In order to get uniformity of shade and size it is necessary to have a large furnace, the one generally called the continuous gum furnace. Under the influence of the repeated high heats required to bake any good tooth porcelain the wires rapidly deteriorate and the muffles burn out. This is proving to be very expensive.

We find it difficult to get uniformity of shrinkage in thin and thick parts of the teeth. This variation results in a form of distortion.

Experiments to make this form of service practicable with regard to size, form, color distribution, expense, etc., are being continued in the hope that it may be possible to make this service of practical value to dentistry.

## The Principles and Practice of Administering Nitrous Oxide-Oxygen and Ethylene-Oxygen\*

(Sixth Article)

### UNDESIRABLY DEEP STAGES OF ANESTHESIA AND HOW TO AVOID AND CORRECT THEM

While the description of the symptoms is the only means of describing the so-called planes of surgical anesthesia, it should be understood that the descriptions cannot be exact because in different types of patients the symptoms may vary somewhat, they may overlap, or one symptom may be premature or delayed. The anesthetist need not be concerned with the division lines between the planes so long as breathing remains strong and he does not begin to operate before the eyeball begins to oscillate or carry his patient beyond the stage in which the eyeball is fixed off center. If the eyeball becomes fixed in the central position, the patient should be very carefully watched and the anesthesia should be lightened until the eyeball returns to an off-center position. This procedure leaves a good margin of safety.

### JACTITATION

Jactitation, or the beginning of muscle spasm, sometimes appears near the close of the second plane of surgical anesthesia and, in the average case, becomes pronounced in the third plane. The breathing then becomes jerky in proportion to the extent of the jactitation.

Jactitation is an evidence of a lack of oxygen. It results when the anesthetic replaces some of the oxygen which the body cells need for metabolism. So long as oxygen is supplied to the cells in sufficient quantity to permit metabolism, there will be no jactitation.

The time required for the ordinary dental operation is so short that 7% oxygen with the anesthetic during the carrying period will supply the cells with sufficient oxygen to permit metabolism, in the average case, and there will be no jactitation.

Even with the most careful throat-packing there will probably be more or less intake of air, and the additional oxygen thus secured may supply the cells during even a long operation so that there will be no jactitation. If the operation is prolonged and the patient gets no air, it will probably be necessary to increase the proportion of oxygen given with the anesthetic to provide oxygen for the cells and to avoid carrying the patient to too deep a plane of anesthesia. Whether or not the oxygen should be increased, as well as the percentage of such increase if it occurs, must be decided entirely from the symptoms.

\* This series of papers is based on a clinic given before the Florida Dental Anesthetists' Society at Orlando, Florida, December 17, 1924, by J. A. Heidbrink, D.D.S., Minneapolis, Minn.

In the fourth or final plane of anesthesia muscle spasm, of which jactitation is the first symptom, becomes complete. It includes the intercostal muscles, the air is forced out of the lungs, and the patient ceases to breathe.

The passage from the third to the fourth stage of anesthesia is marked by the dilation of the pupil. The iris is the last of the visible involuntary muscles to surrender to the anesthetic. This fourth stage is a stage of serious danger. There is no excuse for a dental anesthetist permitting a patient to reach this stage because there are such pronounced symptoms to inform him of its approach that there can be no mistake in their interpretation. Should a patient reach this stage, he may be quickly returned to the surgical stage by a breath or two of air or oxygen, which may be given direct for this purpose.

If all symptoms are disregarded and the patient is permitted to progress in this stage, the jactitation of the iris will give the progressively dilating pupil an irregular outline. The muscle spasm which has been referred to will become complete and the pupil will then be the full size of the iris. When the muscle spasm finally forces the air out of the lungs, it will usually be with a crowing sound. Cyanosis will be complete.

Should a patient reach this condition, it is of the utmost importance that the anesthetist should not allow fear to master his self-control and interfere with measures for resuscitation. This condition is comparable to other forms of suffocation, such as drowning, from which people are resuscitated after a much longer time than is required to institute effective resuscitative measures under office conditions. Experience with animals shows that they may be resuscitated from this condition without serious after-effects.

To resuscitate patients in this condition it is necessary only to open the air passages and get air or oxygen into the lungs. If this is done, the patient recovers promptly, perhaps in less than a minute. To open the air passages the tongue must be brought forward. The ordinary method of the past has been to employ tongue forceps. The tongue may be more easily, quickly and safely brought forward by passing the index finger of one hand backward alongside the tongue to its root, wrapping the finger around the tongue at a point just above the epiglottis, the cartilage of which can easily be felt, and carrying the whole tongue forward. It is very important that the finger should reach back to the point indicated because the largest portion of the tongue is near its middle, and if it be grasped at its largest diameter or just anterior to it, the finger will slip off without bringing the tongue forward.

When the finger is used in this way, it not only brings the tongue forward but opens the air passages because it stretches the glottis and

opens the epiglottis, and the tissues of the throat cannot close so tightly about the finger but that air can enter.

Forceps used for this purpose frequently slip off and bruise the tongue. Even if the tongue is carried forward with forceps, the muscles of the throat, which share in the general muscle spasm, may close around the base of the tongue and prevent air and oxygen from entering.

The selection of the index finger to be used in bringing the tongue forward will be decided by the position of the prop in the mouth. If the prop is on the right side of the mouth, the index finger of the right hand should be passed backward along the left side of the tongue. If the prop is on the left side of the mouth, the index finger of the left hand is passed along the right side of the tongue.

When the air passages are opened, the patient is caused to breathe by making pressure on the lower ribs at intervals which correspond with the usual breathing intervals.

*(To be continued)*

## Do You Know

- That 21,000,000 letters went to the Dead Letter Office last year?
- That 803,000 parcels did likewise?
- That 100,000 letters go into the mail yearly in perfectly blank envelopes?
- That \$55,000 in cash is removed annually from misdirected envelopes?
- That \$12,000 in postage stamps is found in similar fashion?
- That \$3,000,000 in checks, drafts and money orders never reach intended owners?
- That Uncle Sam collects \$92,000 a year in postage for the return of mail sent to the Dead Letter Office?
- That it costs Uncle Sam \$1,740,000 yearly to look up addresses on misdirected mail?
- That 200,000,000 letters are given this service, and—
- That it costs in one city alone \$500 daily?

## AND DO YOU KNOW

- That this vast sum could be saved and the Dead Letter Office abolished if each piece of mail carried a return address, and if each parcel were wrapped in stout paper and tied with strong cord?

## MORAL

Every man knows his own address if not that of his correspondent.

PUT IT IN THE UPPER LEFT-HAND CORNER!

## Dr. John Baker\*

PERHAPS THE FIRST DENTIST IN AMERICA

By H. H. Manchester, New York, N. Y.

The interest aroused by the writer's previous article on the first dentists in America has encouraged him to go into the subject more fully. This is further justified by new light which has been thrown upon the history of Dr. John Baker.

To put it briefly, this new information consists of the identification of John Baker, the surgeon dentist, as the Dr. John Baker who, at the time of his death, left an endowment to Trinity School, which is still in existence. A few years ago William H. Trueman of Philadelphia, with the help of the school, identified Dr. Baker to their mutual satisfaction as the dentist John Baker whose name appeared in the Philadelphia directory of 1785, and there is little doubt that the Philadelphia dentist, John Baker, was the same one who advertised both in Boston and New York.

John Baker, it will be noted†, advertised in the *Boston Evening Post* of January 22, 1767, and again on February 2nd, that he was about to leave Boston and that those disposed to apply to him should do so at once. He also hoped that those who doubted the safety of dentistry because of its novelty were convinced.

This advertisement should be compared in date with that of Robert Wooffendale, who announced in the *Pennsylvania Chronicle* of April 6, 1767, that he had just arrived in Philadelphia from England, via New York. Wooffendale is thought to have come to New York in October, 1766, but as Baker announced that he was practically through in Boston in January, 1767, he may well have arrived there before Wooffendale arrived in New York.

When Baker first came to Boston is still uncertain. A search through the available Boston papers of 1766 has not yet brought to light any notice of his advent, but it is still possible that some such announcement may turn up.

Baker did not leave Boston as soon as he expected, for he again advertised on April 30, 1767, that he would leave in ten days.

He may not have left even then, possibly because the announcement brought still other clients. At all events, it was a year later, or on April 28, 1768, that he advertised in the *New York Journal* that he had just arrived from Boston, where he had treated more than two thousand patients.

\* The author wishes to acknowledge his indebtedness to Dr. Wm. H. Trueman, Germantown, Pa., for some of the information set forth in this article.

† See *The Dental Digest*, March, 1925.

Here again there is a gap in Dr. Baker's history. Where he was from 1770 until after the Revolution is uncertain. He was in all probability the surgeon dentist of the same name who was listed, as mentioned, in the Philadelphia directory of 1785. But after this comes another blank in his known record.

Here begins the information concerning him which has been handed down at Trinity School.

Dr. John Baker, who later endowed the school, was born in England at an unknown date. He had resided in the Island of Jamaica and in the Parish of Burton, County of York, Virginia, as well as in Philadelphia. In fact, in his will he speaks of himself as formerly of the Parish of Burton in Virginia. Moreover, he mentions posses-

**JOHN BAKER,**  
**SURGEON DENTIST,**  
**DEPARTS this Town in 10 Days,**  
 and hopes that those who doubted of the Safety of his Art, from its Novelty in this Country, are now convinced both of its Safety and Usefulness.  
 ✿ Until he leaves this Town, he continues at Mr. John Watson's, in the House wherein Captain Randal, lately lived, near White-Hall Slip, where he will be ready to contribute to the utmost of his Power, to serve the Public in his Profession.  
 His DENTIFRICE, with proper Directions for preserving the Teeth and Gums, will be to be had at the Printing-Office at the Exchange, after he has left the Town. N. B. Each Pot is seal'd with his Coat of Arms, as in the Margin of the Directions, to prevent Fraud.

Dr. Baker announces that he is about to leave New York.  
 From N. Y. Journal, July 21, 1768.

sions in Great Britain, the Island of Jamaica, Virginia and Pennsylvania. He does not mention these in detail as he does his New York estate, and presumably they were of much less importance, but the references rather imply a former residence in those districts.

There is also a tradition at the school that Baker made a set of teeth for George Washington which were long preserved under glass at the Capital. It is declared also that the reason Washington seldom made a speech was that the false teeth, as made in those days, "might jump out of his mouth during the oration and bite somebody."



Baker returned to New York about 1791, and in that year he purchased from Mrs. Mary Ellis a farm six miles north of the city as then located. This farm contained about forty-six acres and was located between what is now Park Avenue and the East River and between 70th and 80th Streets. The estate had been known as the *Sans Souci*, but after Dr. Baker purchased it it became known as *Baker's Retreat*.

**JOHN BAKER,**  
**SURGEON DENTIST;**  
**BEGS leave to acquaint the gentry,**

That he is now in New-York, at Mr. John Watson's, in the house wherein Capt. Randall lately lived, at the corner of Pearl-street; and will wait on them on receiving their commands.—He cures the scurvy in the gums, be it ever so bad; first cleans and scales the teeth from that corrosive tartarous gritty substance, which hinders the gums from growing, infects the breath, and is one of the principle causes of the scurvy, and (if not timely prevented) eats away the gums; so that many people's teeth fall out fresh. He fills up with lead or gold, those that are hollow, (so as to render them useful) and prevent the air getting into them, which aggravates the pain. He makes artificial teeth, and fixes them with pure gold, so that they will remain fast for many years, and may eat, drink and sleep, with them in their mouths as natural ones, from which they cannot be discovered by the sharpest eye. He displaces teeth or stumps, after the best and easiest method, be they ever so deep sunk into the socket of the gums. He has given sufficient proof of his superior judgment in this art, to the principal nobility, gentry, and others of Great-Britain, France, Ireland and other principal Places in Europe; also to upwards of two thousand persons in the town of Boston.

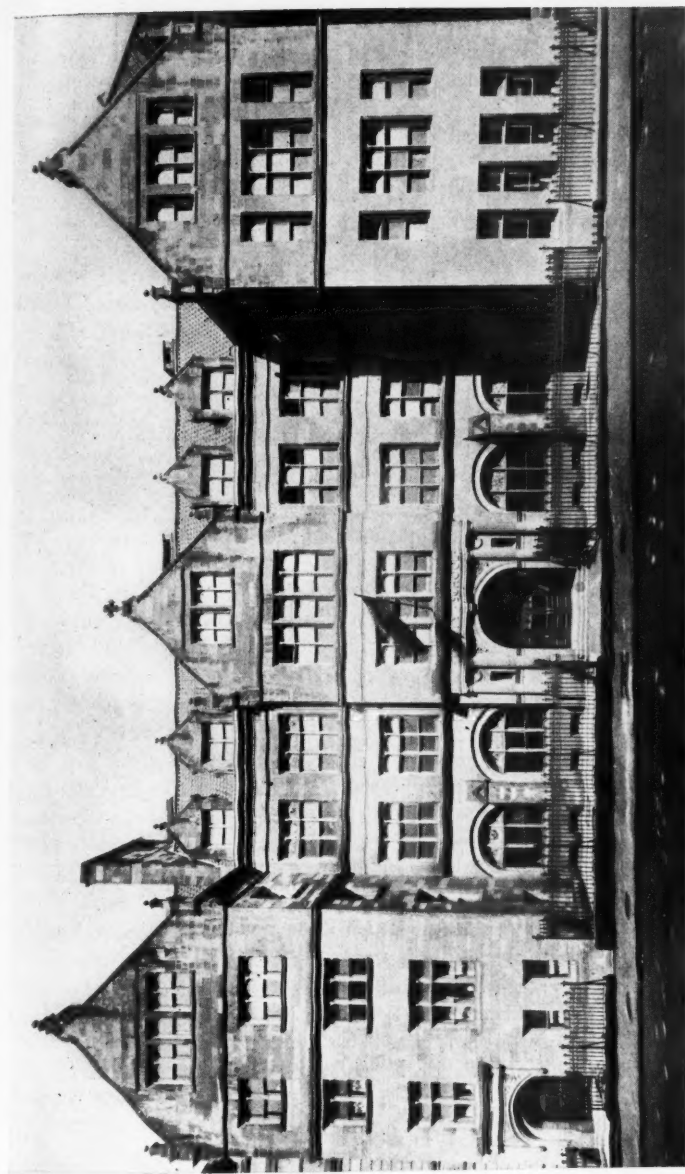
✂ His Dentific, with proper directions for preserving the teeth and gums, is to be had at his lodgings.

N. B. Each pot is sealed with his coat of arms, as in the margin of the directions, to prevent fraud. 21

Announcement of Dr. Baker, Surgeon Dentist, of his arrival in New York from Boston and elsewhere. From the N. Y. Journal, April 30, 1768.

He had no children, but lived alone with his wife and slaves. Some of his friends were Dr. Thomas Jones, Judge William Johnson and Col. Robert Troup.





The present Trinity School, 139-147 West 91st Street, N. Y. City, endowed through the will of the Surgeon Dentist, John Baker, perhaps the first regular dentist in America.

In his will, made in 1796, he declared himself an inhabitant of the 7th Ward in the City of New York. He left his estate for life to his wife, Mary, and after her death, first to John and Christian Banister for life, and after their death, to the sons of John Delafield in succession for life. After their death, in turn, he left it in trust to the Government of the State of New York for the free school under the management of Trinity Church in the City of New York. The point about this was that Dr. Baker was a thorough believer in the future growth of New York City and had the greatest faith that the estate would eventually be of great value.

**• Teeth drawn, and old broken Stumps taken out very safely and with much Ease by James Mills, who was instructed in that Art by the late James Reading deceased, so fam'd for drawing of Teeth, he is to be spoke with at his Shop in the House of the Deceased, near the old Slip Market;**

An ad of a "tooth puller," James Mills, in the N. Y. Weekly Journal, January 6, 1735, long before regular dentists reached the Colonies.

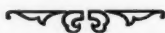
This school, by the way, was established with the aid of the Venerable Society for the Propagation of the Gospel in Foreign Parts. This society sent fifty pounds in 1709 to found the school and twenty-five pounds a year until the Revolution. The school was first started in the tower of Trinity Church, but followed the growth of the city up town.

The trustees of the school had the same faith in the growth of New York, and in 1806 they incorporated as the New York Protestant Episcopal Public School, which ultimately received the endowment left by Dr. Baker. This endowment fully justified Dr. Baker's faith, as its value was estimated at between one and two million dollars.

Dr. Baker died the same year in which his will was made. His body was at first interred in a vault on the estate, but as this eventually fell into decay, the body was at length removed to Trinity Churchyard.

Thus, from the evidence, it is quite certain that the first or one of the first two regular dentists in the colonies was one of the great early benefactors of the country.

342 West 85th Street.



## Importance of Physical Diagnosis to the Dentist

By Stanley Slocum, D.D.S., New York, N. Y.

To emphasize the importance of physical diagnosis, a case will be presented. Patient, male, thirty-four years old, appeared at my office for periodontal treatment on September 26, 1923, with a series of radiograms taken two days previously. One tooth was extracted and the treatment of the pyorrhea completed in the course of time. When the mouth was in a healthy condition, the reconstruction of the entire mouth was undertaken.

The tragedy of one tooth is reported, an upper left first bicuspid. Radiogram No. 1 shows the upper left first bicuspid with a gold crown carrying a dummy second bicuspid. The crown was removed at the first visit for periodontal reasons. On June 6, 1924, the vitality of the first upper left bicuspid was tested and responded to "3" as against "6" for the other bicuspids in the same mouth. The region was transilluminated by low-power light and found to be what we now know as normal. With this evidence the tooth was prepared for



Fig. 1



Fig. 2

a porcelain jacket crown with a slight shoulder. Six days later the porcelain jacket crown was set with cement of non-irritating variety. The occlusion was adjusted at the same sitting. Two days later the occlusion was again tested. Two weeks later the tooth became sore for the first time and the patient presented for relief. Nothing more was heard until the patient of his own accord had radiograms taken and brought them to my office for comparison with the old films on file. Radiogram No. 2 showed pathologic disturbance. The area was transilluminated, but no evidence of positive infection could be seen at the apex of the tooth in question.

The tooth was opened through the crown into the pulp chamber, and a very slight odor came forth. Treatment was sealed into the tooth, and the patient dismissed for three days. At the next sitting three radiograms were taken to determine the length of canals and the

proximity of the apices to the floor of the antrum. Radiograms Nos. 3, 4 and 5, taken January 16, 1925, show the different positions.

At this time the physical condition of the patient was investigated and the following facts ascertained: high blood pressure; blood count 70, a neurasthenic; a case of auto-intoxication. As a result, my reasoning was that if this man's resistance was not sufficient to withstand



Fig. 3

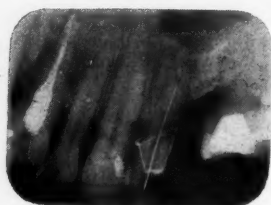


Fig. 4



Fig. 5

the irritation of this tooth during jacket crown preparation when everything else at the time appeared normal, how could any method of pulp sterilization be certain to quarantine this area and the floor of the antrum in spite of this patient's low resistance? The facts were presented to the patient, and the suggestion made that the tooth be sacrificed. The tooth was removed two days later and two granulomas found at the apices.

There are several points of interest, one of which is that a physical diagnosis is of great importance. We as dentists should look upon a patient as a man wandering in the dark now in our hands. The tooth was removed, but with our present knowledge have we removed the cause?

597 Fifth Avenue.



## Various Requisites to Success in Dental Practice

By Frank W. Sage, D.D.S., Cincinnati, Ohio

From long experience and observation of dentists and their relation to their patients I conclude that the first requisite to success in practice is an intimate understanding of human nature. This may seem, in the beginning, like a kindergarten address to four-year-olds—it is indeed addressed to numerous grown-up kindergartners who were never trained to stop and think all around a subject before concluding they knew all about it. I mean all-around men and women patients in particular.

Some college professor said that one who has not studied psychology has not really learned to think. As to that, we say it all depends on the person. It is like saying that none but college graduates can succeed in life, while everybody knows that many of the most successful men are not college graduates.

Recently I was standing beside a dentist's chair listening to his advice to a patient, a lady expensively dressed and no doubt of ample means. The dentist was decrying gold inlays, affirming that a carefully made amalgam filling answered every practical purpose of the gold inlay, taxed the patient's endurance less, took much less time and was far less expensive. While listening, I was studying the patient's facial expression. A close observer might readily see that she was a woman of preconceived opinions. She had her mind set on having an inlay, if anything was to be inferred from her half-attention, as he talked, as well as from the peculiar set appearance of her lips. Occasionally she cast an upward glance into his face, blinking silent opposition. The dentist several times repeated that he sometimes made cast inlays, but that he rather opposed that method of filling teeth. Finally she made an appointment, but she seemed in an absent-minded mood as she adjusted her expensive furs and went out.

The dentist quietly laughed, explaining to me that she was rather set in her notions, one of the kind who comes to tell the dentist what to do and how to do it instead of seeking his opinion and advice. Being much his elder, I suggested that the next time such a patient applied to him he should keep his eyes wide open, his ears also, and clear his brain of any trace of cobwebs. I offered to quote the kind of message she would send before long saying that it would be impossible for her to keep her engagement—that and nothing more! He "pooh-poohed" the intimation and said I might know my own patients but not his. He promised to call me up so that I might return to see him make that amalgam filling. As to that my phone has whispered naught—gone to another dentist has the lady!

When Mr. Barnum said people loved to be humbugged, he spoke a half-truth. People will tolerate being humbugged, if perchance the humbuggery has a semblance of the truth they had previously imagined.

Now this dentist is conscientious beyond doubt, unless, perhaps, he is simply lazy. Admitting that he is not lazy, he is at all events not readily impressed by what passes directly under his eyes, and which another, a keener, more alert observer, would before long see, to wit—that he would do better to “push in the stop,” as an organist would say, and try another strain. That patient did not want a filling; she wanted an inlay. She was one of the kind who wants gold whether it is going to show or not. She would feel better if all her fillings were gold, would eat better, sleep better. There are many persons just so constituted.

Some dentists are reluctant to try new devices, new methods. If long in practice, they easily call to mind and direct your attention back to a dozen innovations in dentistry which have been tried by others more enthusiastic but have been found wanting and abandoned. Too true! Pride may restrain such as have tried the new thing and have been “bitten” from letting the fact become known among their townsmen of the profession, for fear of ridicule. Or, if selfish, they may not wish even patients to find it out, lest the flow of patronage to their offices subside. Just here we see an advantage in attending dental conventions. The dentist may there get an unreserved, unprejudiced opinion from others practicing afar as to the value of this, that or the other new thing. It is often peculiarly significant that the vaunted something is passed in silence in the convention, or is perhaps shown up as a failure. Dentists are there free to say just what they believe.

For instance, years ago a foreign dentist promulgated a theory of dental prophylaxis and arresting of decay, based on the use of acidulated water as a mouth wash, claiming to have gained results most remarkable, indeed astounding, in checking decay in the teeth of children in orphan asylums under his charge. His theories, as promulgated in a book he published, received little or no attention in various conventions the writer attended and in dental journals. Of recent months the gentleman has been challenged on the very best authority, here in the United States, as one self-deceived, lacking scientific training or, at least, accuracy as to his observations and conclusions. So the bottom falls out of his very extraordinary claims.

The observing dentist, who has learned to peer penetratingly here and there for confirmation of any claims set afoot for the attention of dentists, soon takes hint from what he sees is attracting little or no attention on the part of the most intelligent men in convention assembled.

Let us return to our lady prepossessed in favor of the gold inlay. This young dentist was under no moral obligation to urge on her the amalgam filling, unless he really distrusted inlays, which distrust did not appear in anything he said. You, in like instance, might hold to the opinion that in deep approximal cavities the dentist can never be certain that his gold inlay fits perfectly the cervical border. That, of course, would justify refusal to attempt the inlay in this particular case we are imagining. What our young man was attempting was to coerce the patient into having the easier operation performed, while the indications were that her desire for the inlay overshadowed all other considerations whatsoever. Therefore he should have yielded to her requirements at the start, reasoning that if the inlay should fail at the cervical border, so might the amalgam filling.

Another suggestion in passing—the dentist who fails to tell his patients that lifelong durability of even the most carefully inserted filling cannot be assured has taken on a handicap which, as the years go on, may prove his final undoing. How many, many dentists practice with seeming success for ten, twenty, forty years, only to find their later days filled with anxiety, vexation, even despair, by reason of an impression growing that they never were first-class dentists! It is deplorable and unspeakably sad to contemplate.

Human nature, as the dentist sees it—how strange! The patient who leaves you, goes to another who makes the gold inlay you did not wish to make, may in time return to you for repair of the other man's failure. She may indeed have spoken with courteous disparagement of you to him; she may then reverse all that and in turn disparage him to you! Be patient, do your best, wait! Only discourage unkind gossip about your rival.

Some difficulties daily encountered by dentists require just a word. The young man with thick lips and full cheeks is likely, by reason of these peculiarities of physical conformation, to prove troublesome when you come to fill his teeth. It is hard to get at a cavity in his front teeth. His back teeth you find all but impossible, even with the aid of any lip-retracting device you may use. You really cannot get along at all unless the young lady assistant stands by to hold away the obtruding lip or cheek. You can do more in an hour for some patients than you can for him in an entire forenoon, and that, too, without the resulting strain on your nerves. It is not his fault, yet you may justly take full account of all the obstacles in making an estimate of services required and services finally rendered.

Some dentists are constitutionally slow—they are born so. It may have been noticed that the slow dentist, who spends quite a while peering into his patient's mouth, searching here and there on every surface of every tooth, is the one who makes the important discoveries



some of us find out, to our regret, only as we go along. You have seen him, perhaps, standing back, looking intently into the face of his patient, and you have wondered why he was wasting so much time. The fact is that he is waiting, with eyes and ears open and all his senses awake, to become impressed with whatever may come under his notice all unlooked for. He is the man who thinks about the thick lips and full cheeks which he finds interfering with even this preliminary examination. He is testing his patient's disposition. It may perchance be that he is taking into account various things he notices from minute to minute as he seems to us idling along to no purpose. He will know, before he begins, what unusual tax on his nerves is likely when he gets to work and will not be constrained to stop in the midst of operating to tell the patient he has not done himself justice in his estimate given of probable expense of the work and must charge possibly fifty per cent more than he said.

There is, however, no fixed rule as to all this. The fast man may get all these things at a glance. To be fast and keen-witted and far-seeing, all in one, is no common gift. Safer is it for a lot of us to be slow in starting. Look well over the field first, look again, still again, and, when you have assured yourself of a full understanding of the situation, speed up, if you know how to do it. This, too, may be learned.

A young dentist friend and I were recently betrayed in a peculiar way as to a painless extraction which he was to perform for a patient, a lady aged seventy-three, whose lower bicuspid roots, decayed to but not under the gum, were to be removed. No difficulty offered. He painted the gum heavily with a saturated solution of iodine, waited five minutes, then injected painlessly, rather deeply. Both roots were easily removed and proved to be hardly a quarter of an inch long!

If either of us had used our wits, we might have known that at her age the resorption of the process had left the roots, so to speak, high and dry. We noted, after all had been finished, the deep downward curve of the lower dental ridge. The cuspid, still in place, with its root bared two-thirds of its length, should have served to show that the bicuspid roots were very short. Do we ever learn it all? We had failed to note the resorption of the maxilla.

A local specialist in exodontia told me recently something we all of us probably knew before, that a sharp hypodermic needle hurts hardly at all. He sharpens his, examining it frequently with a powerful magnifying glass. A dry hone such as is used for razors is admirable for this purpose.

Any ordinarily nervous person knows that a sliver hardly visible to the naked eye, driven a sixteenth of an inch into a finger, may annoy one for hours. So do not scoff at the fears of a patient who shrinks from a hypodermic syringe. I recall a well-known dentist once saying

he could not stand it to have a hypo-syringe pointed from across the room toward him. Yet dentists, claiming to do painless extracting, drive patients to the verge of fainting by too hasty, incautious use of the syringe. This is unpardonable; worse, it is all but criminal! Luring patients to the office under false assurances! Painless extraction, but—how about painless gum obtunding? Are you guilty or not guilty?

Yet with all due care the dentist may inflict pain in certain cases. An inflamed gum will tolerate no approach whatever in many cases. Use gas inhalation for such.

Dentists as a class are being more respected today than ever before. Our high-priced office attendants, young women of education and intelligence, have helped on the work of dignifying our calling. Some of us recall a day when a dentist of national reputation might even answer a ring at his front door on occasions. A mere trifle that, many would say, yet patients are ever unconsciously affected by such trifles in this day when the high-up man of affairs can be reached only through a cordon of fending-off subordinates.

Oh, weak human nature, so easily influenced by mere externals! Men admire the evidences of care-taking frugality, though seldom enthusing over it. They bow carelessly to the old, well-kept suit of clothes; bow a trifle lower, with hat removed, to the new thirty-dollar suit; stop, shake hands, invite to luncheon the seventy-five-dollar suit. All humbug, of course, and disgusting to sensible people! Is it, though? Such sycophants will pay the higher price—the dentist's higher price—asking no explanations. Oh, well, perhaps not always so, but it's a fair risk—pay your tailor for the better suit!

Many dentists have no idea how the imagination of a patient may be played upon. The postponing of operating by applying palliative treatment for two or three weeks is a very important help to the harried dentist. Simply drying the teeth and cavities, under protection of the dam, and then waiting a full hour make a world of difference. Let the patient read in another room while waiting.

We cannot all have expensively equipped offices, but we may one and all have a trained habit of forethought as to how to treat patients and what treatment to require from them. Some young men have a sort of femininity which shows in their faces, their walk, their every act. They are naturally either amiable or perhaps merely timid, wanting to be let alone. They seem to think it a risky thing to let a patient see they are displeased with them.

Be a trifle more dignified, less smilingly amiable, frown when necessary. You will do better in your practice, patients will like you better, although they will perhaps love you less. Never mind—we are not working for love! Let them go elsewhere if they must. Don't

you find that many, even after condemning you, repent in time and come back?

Be a *good dentist*—the being a good fellow to everybody is of less importance. You are to be many years in dentistry, unless patients worry you to death or drive you into some other calling!

A rather "exclusive" city dentist, retired, told me that he sometimes deliberately suggested to patients that they go elsewhere for dental services, freely declaring that he felt he could not get into sympathetic "touch" favorable for operating for them, or something to that effect. Not a bad advertisement for the ethical, unadvertising dentist! A natural curiosity you have become to a lot of others, hearing of your strange manner. They come for a look, and stay for an appointment! Oh, funny human nature!

What most of us need is severe yet kindly cross-questioning from childhood up by wise seniors, men and women of experience in the world and life, in order to find out just what we are that we should not be, just what we should be that we are not, and then a corrective course in common sense.

22 The Parkside, Clifton.



## In Defense of the Gold Crown

By S. Joseph Bregstein, D.D.S., Brooklyn, N. Y.

Considerable talk has been exchanged pro and con among our dental brethren regarding gold crowns. Also, physicians have walked ignorantly into the condemnation of a really innocent restorative material.

Amalgam or cement fillings are not classed as mouth evils though under them often there are inaugurated alveolar abscesses. Nevertheless, a good many medical and even dental practitioners, when they see an indication of rarefaction radiographically or clinically beneath a crowned tooth, will ostensibly exclaim: "See! Gold crowns! I told you so!" There is no reason for a gold crown to be the causal factor in the production of alveolar destructions. To begin with, a dentist would never deliberately place an amalgam in a cavity without first excavating all decay and sterilizing. Still, how many crowns do we remove with positive evidence of untreated and unfilled cavities? How many dentists forget to clean and polish a tooth before cementing the crown? I have removed countless numbers of such crowns where the tartar and green or brown discolorations have been allowed to remain.

It is oftentimes those very things which are directly within our vision that we overlook in our ardent quest for detail. An old saying is: "Great oaks from little acorns grow." And so it is with the little things men often neglect. Small at first and apparently unnoticed, they are bound to develop into bigger and more serious things.

When a tooth is being prepared for a gold crown and the fissures of that molar, for example, are discolored, do not hesitate to engage prophylactic measures and arrest the decay of the future. Actual caries does not have to be present to necessitate care and prevention.

I well remember as a boy going to the local dentist and getting two "caps" placed on my molars. The nomenclature is very descriptive of the type of work. The tooth was capped in much the same manner as a cap is placed over a gas pipe. No attempt was made to prepare the tooth properly or to restore occlusion or contact points. First, the dentist put the gold shell on my tooth and told me to bite. In went the sharp edge of shell into the periodontium, leaving a beautifully carved bacterial entrance into the depths beyond. I pleaded with him that it cut, but he said I'd get used to it. I suffered a few days and, really, I did get accustomed to it.

I wonder how many are still practising in this antiquated fashion. Make it a point, in placing a gold crown for the first time, not to allow your patient to bite against it. Exert a delicate finger pressure and, when you see any slight tissue blanching, remove the crown and

trim. Repeat until all pressure is removed, being ever mindful that pressure is the cause, in whatever form it be, of pyorrhea alveolaris.

It has been argued that grinding the enamel in preparation for a crown renders a tooth susceptible to thermal shock with subsequent destruction of pulpal structures. All that it is necessary to remove from a tooth is sufficient enamel to allow for a thickness of gold and enough occlusally to relieve the bite. This removal of enamel is not a direct cause of thermal shock. In the preparation of any deep-seated cavity do we not get far beyond the enamel and well into the dentine? Often it is even necessary to cap the pulp, for the decay has been so extensive. Yet this type of procedure is considered by Black, Marshall and others as good dental practice.

In a crown preparation at no time are we obliged to get much beyond the enamel, regardless of the bite. However, in those cases where the bite is very close, I do not believe a crown is indicated, for it might involve too radical grinding of the occlusal surface and, in that event, we are too near the pulp.

Care should be exercised in grinding or, let us call it, shaving the tooth. The stone should be of either a medium or a fine grain of corundum, as a coarse one is apt to cause injury to the periodontal tissues. We should keep the stone moistened during the operation. A good plan is to take a quarter of a cotton roll and puff it up at one end. Dip this end into cold water frequently and apply to the tooth as you cut with short, intermittent applications of the stone. Instead of the water, any of the essential oils or analgesics can be topically applied.

The reason we see so many crowned teeth condemned is due largely to some break in the chain of correct operative procedure at the time of construction. The metal itself has absolutely no deleterious effect on a tooth. We are taught in college and know from experience that gold takes kindly to dental tissues and, were it not for its color, it would be the ideal filling and restorative material.

After the crown has been trimmed to the desired length and the bite appears normal, take a fine stone and put a knife edge on the gingival portion of the crown. At the time of cementation this edge is burnished close to the tooth. In cementing we should be mindful not to put too much plastic material into the shell, for excess oozes out and in setting produces pressure against the gum tissue, often cutting. After the crown has been set—in a dry field, of course—with a fine explorer remove any excess which may have gotten into the marginal space. Paint the area with Tr. aconite and iodine and dismiss the patient.

I feel certain that if these few principles of care and asepsis are carried out, we dentists will in the future have kinder words to say

for gold crowns. Further, let me quote Dr. James K. Burgess, who states that "any well-constructed and fitting fixed bridge is as clean as the patient who wears it." I might add that a gold crown also is as clean as the person who wears it.

6729 Fifth Avenue.

## Pathodontia Section

OF THE

FIRST DISTRICT DENTAL SOCIETY, NEW YORK

(This report is neither official nor complete. It represents the impressions made by the speaker on one of the audience.)

The regular meeting of the Pathodontia Section of the First District Dental Society, New York, was held on Monday evening, April 27th, at the Academy of Medicine, 17 West 43rd Street, New York City.

Prior to the meeting a dinner was given at the Republican Club on West 40th Street to the essayist of the evening, Dr. Percy R. Howe.

The paper, entitled *Pathological Changes in the Investing Tissues of the Teeth Experimentally Induced by the Character of the Diet*, was intensely interesting and enlightening to the many present at the meeting.

The first point brought out by Dr. Howe was that the nature of the tissues involved in periodontal disease, the accompanying processes concerned and the results of animal experimentation appear to support the idea that periodontal disease is not a disease entity but a system of metabolic derangement.

Periodental tissues are modified bone tissues or are true bony structures. The cementum is modified bone. The alveolar process is true bone. It is superimposed on the maxillary bones proper, is formed with the teeth and disappears with loss of the teeth. The periodental membrane is similar to periosteum, containing osteoblasts, cementoblasts, inelastic fibers, and is vascular. The inelastic fibers are inserted in the cementum on one side. On the other they are attached to the alveolar bone. Therefore, Dr. Howe asserted, it is reasonable to infer that in periodontal disease there is in reality a problem of bone disease. It may be of an incipient nature or it may indicate extensive involvement.

Pathological study of periodontal disturbance shows a further similarity to various types of bone disease. The deposition of tartar about the teeth is an indication that the calcium metabolism is disturbed;

or it may follow degeneracy of the peridental membrane on the same principle that calcification follows degeneracy of tissue in many parts of the body. Periodontal disturbance in every degree, from a slight marginal gingival redness to complete destruction of the alveolar bone and even the maxillary bones, has been brought about, in animal experimentation, by derangement of the metabolism induced by the character of the diet. Dr. Howe stated that these conditions are brought on with rapidity in animal experimentation and the process is exaggerated, but that the principles which underly the effects are clear. With dietary correction a reversal of the process is instituted and, if the destruction has not been too severe or of too long standing, a cure is effected.

Dr. Howe proceeded to tell of the many ways in which peridental disturbance may be brought about and cited the following:

Changes in the supporting structures of teeth of young dogs as a result of a deficiency of the fat Soluble A; greatest damage was done to these tissues when calcium in the diet was low. In the earlier work from their laboratories special attention was given to the effect of a deficiency of the antiscorbutic factor on guinea-pigs and monkeys, which work is being continued in connection with the Pathological Department of the Harvard Medical School. Dr. Howe enumerated some of the changes observed by Dr. Wolbach, head of this department, and gave the report of this gentleman on studies of the effect of a deficiency of the fat Soluble A. They have observed in monkeys that peridental trouble has followed a diet high in protein and in cereals and are inclined to consider this effect to be due to an excess of acid ash over basic.

In telling of the effect of the scorbutic state upon the production and maintenance of intercellular substances, the importance of orange juice in the diet was stressed. Guinea-pigs deprived completely of antiscorbutic substances were studied. Control guinea-pigs, which received the same diet with liberal administration of orange juice or green vegetables, remained healthy. The earliest effect of the scorbutic state was found in the incisor teeth, observed in six to seven days by the manner in which the formation of dentine was affected and in changes in the layer of odontoblasts. A few days later very striking conditions were found, among the most notable being the separation of the layer of odontoblasts from the dentine. This space is presumably filled by liquid. The odontoblasts undergo striking changes in regard to size, arrangement and staining reaction. A single administration of orange juice or any antiscorbutic upon this condition is easily demonstrable within forty-eight hours and results in the prompt formation of dentine so as to fill the space caused by the separation of the layer of odontoblasts. In the bones, formation of



bone ceases immediately, while osteoblasts in certain locations, particularly beneath the periosteum, continue to proliferate. This applies to both flat bones and long bones. Accumulations of osteoblasts of considerable size may occur before hemorrhages take place. That the cells under consideration are osteoblasts is proved by the effect of the administration of a single dose of an antiscorbutic substance, because it is followed by the prompt appearance of bone matrix between the cells.

Dr. Howe told of another observation among the monkeys, the very marked effect of roughage on the indigestible residue in the diet, of interest because our concentrated diets are too often of a pasty consistency. On such diets the oral tissues in monkeys become congested, the teeth become covered with tartar, loosen, drift from their normal position and occlude irregularly. A normal intestinal condition means a normal oral condition, and it is the completeness of the diet as a whole that makes for the most perfect oral condition. It is a well-known fact that races living on natural foods are practically free from periodontal troubles. "Periodontal difficulties," Dr. Howe concluded by saying, "are products of civilized life. It may be a matter of considerable time before pronounced pathology is observed, but as cases come to us in practice the damage has been done. Our methods of treatment are highly commendable. Early recognition of the onset of this difficulty should be urged, together with a consideration of the fact that the fundamental cause is of systemic origin."

General discussion of the subject followed after being opened by Alfred Hess, M.D., and Hugh Chaplin, M.D.

The following officers were installed at the meeting for the ensuing year: Chairman, I. Hirschfeld; Secretary and Treasurer, E. Alan Lieban; Editor, H. J. Kauffer.

## Is a Pulpless Tooth Healthy Because it is Comfortable?<sup>\*</sup>

The old idea ran somewhat as follows:

Ease = comfort = health.

Disease = discomfort = lack of health.

We know now that this idea is a half-truth. Probably all tissues in perfect health are comfortable. But many tissues may be in advanced stages of some diseases with no recognizable signs of discomfort. Some tissues not only may be diseased themselves but may

<sup>\*</sup> The material for this article is taken from *Dental Infections* by Weston A. Price, D.D.S., M.S., F.A.C.D.

be the seats of continuously active infection without giving a single recognizable sign of local discomfort. The results of the infection may be visible only in the breaking-down of other organs.

There are many pulpless teeth, formerly putrescent, which are comfortable, so far as local reaction goes. Radiographs of some show radiolucent areas or osteitis; some have fistulas; some have no radiographic evidence of periapical pathology or have increased density. Some patients with radiolucent areas and fistulas seem to be well and happy and vigorous. Other patients, without a discernible sign of periapical pathology, exhibit signs of serious or advanced systemic breakdown. In many such cases the teeth are not regarded as foci of the breaking infection because they never cause pain, they have been treated, the root canals are filled, and there is no periapical radiolucency or osteitis.

Yet patients with such systemic breaks, sometimes manifested in diseases generally regarded as incurable, such as some heart lesions, frequently improve greatly in health upon the removal of the teeth and curettement of the periapical region. Cultures from that region often demonstrate the presence of infections. The patient's recovery is often materially aided by the employment of vaccines made from the periapical infection.

The periapical infection is not necessarily that of a pus-producing organism. Alone, it may not be effective in breaking down the health of the body, but its presence for a long period in the body fluids may materially hasten the onset of the degenerative diseases. Or, when the resistance power of the body has been sufficiently reduced by some overload, it may administer the last, fatal kick.

Comfort about a pulpless tooth may indicate a state of health. On the other hand, it may mean a lack of local reaction and that a periapical infection is discharging organisms and products into the body to become effective elsewhere.

Pulpless teeth are different things under different conditions. In the mouths of the healthy and vigorous they are doubtless permissible, but only so long as that person is without overloads. In the mouths of the sick they are possible foci of very serious infections, and the patient's prognosis will be much more favorable if they are removed.



## Old World Wanderings of an American Dentist

By John Jacob Posner, D.D.S., New York, N. Y.

Visiting Dental Surgeon, St. Luke's Hospital, New York

*(Continued from June)*

### BERLIN

One of the best equipped oral surgery clinics in Germany is that of Dr. Williger in Berlin. The dental school there is one of the foremost in the country. Dr. Williger received me very kindly, and I enjoyed my short stay with him. After the operations of the morning were over, we repaired to his office on the same floor, where we sat and chatted. He is an excellent surgeon and has written a short, practical work on minor oral surgery. This has not been translated into English.

Berlin itself is a well-laid-out city, which struck me as being very much like New York. It is a great source of interest to the visitor, for it is rich in museums, architecture and other treasures of artistic and historic interest.

### BRESLAU

My next journey was to Breslau in Oberschlesingen. Here I sought out Professor Partsch, the grand old man of oral surgery in Europe. I would compare him to our Truman W. Brophy. Throughout the length and breadth of Europe his name is known to dentists and physicians alike. The school of dentistry in which he operates is a dismal, dilapidated structure. The oral surgery clinic is held in one large room, simply equipped. I had expected to find this famous man in more pretentious surroundings.

Professor Partsch showed me his collection of stereoscopic pictures taken over a period of twenty years. It includes every case of interest which has presented itself at the clinic during that time. Partsch's book on oral surgery, written a few years ago, is not to be had—the demand was so great that the edition was exhausted and conditions make it impossible to print another edition. Fortunately I was able to secure a copy from a student I had befriended who had been an army officer. With the book came also a pair of high-powered field glasses which he had carried during the war.

### MUNICH AND ST. MORITZ

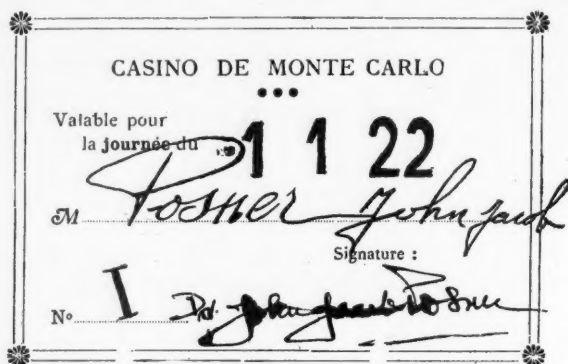
I journeyed to Munich from Breslau and there enjoyed the art collection for which the place is famous. There are dozens of priceless Rembrandts, Van Dycks and Giordano pictures there. The museum was practically deserted while I was there. Later in the afternoon I visited the München Hofbrau Haus. This place was crowded. The

reader must not be confused and fall into the error of concluding that therefore München beer is of more importance than art. Heaven forbid that lovely beer should be compared in value with art, yet I feel certain that Art would take the full count of ten were the vote to be taken at the Hofbrau Haus!

Since it was close upon Christmas, I decided to visit St. Moritz for the winter sports. I arrived at the Palace Hotel at dusk and had no idea of what the place would look like. In the morning I gazed out of my window, which faced the lake, and the sight was one never to be forgotten—snow-topped mountains on all sides, green glaciers off in the distance, and the wide expanse of white snow on the frozen surface of the lake. Here at St. Moritz I loafed through Christmas and the New Year, enjoying the pleasures of the Engadine Valley. My skates served me twice a day on the flooded tennis courts, which were frozen like glass. The climate is so mild and pleasant during the day that no heavy coat is needed. In fact, I was surprised to see that most people who had been there for a week or so were tanned by the hot sun. During the night, however, the mercury would drop well below zero.

#### ROME AND POMPEII

Leaving St. Moritz, I went to Sondrio and crossed the Italian border there. Then came journeys through Milan, Genoa, Nice, Monaco and Monte Carlo. I received a card of admission to the gambling casino,

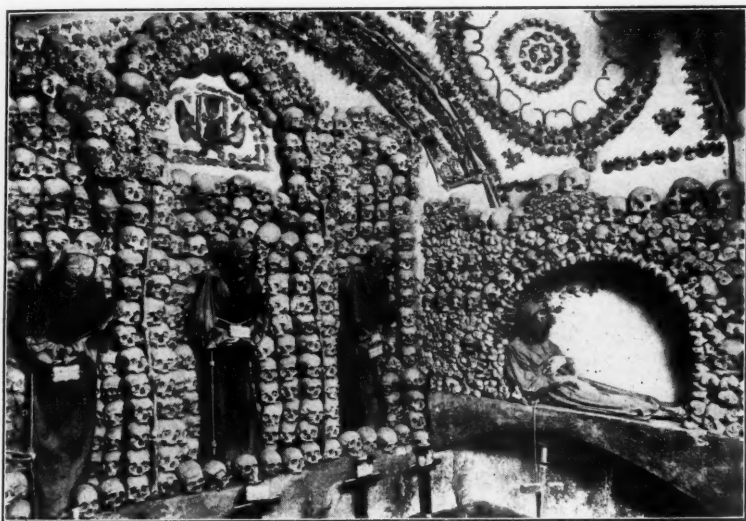


Admission Card to Monte Carlo.

but merely watched. My game is played with a pair of dice. Dice is a game of chance, but the spinning roulette wheel with the handsome croupier in evening clothes raking in your money with sickening regularity just didn't look right to me!

I returned to Genoa and from there went to Rome. As a boy, I remembered Macaulay's *Lays of Ancient Rome* and, as I stood on the bridge crossing the Tiber, I thought of Horatio and his gallant stand. Who can describe Rome? You stand in silent contemplation before the ancient ruins of temples and theatres, the Coliseum, the Arch of Tiberius, the Forum. What a world, what men, what ambitions—all in the dust, just memories of the past!

I visited the catacombs of Rome. While waiting for the return of the monk who was to act as guide, my attention was drawn to a strange sight. One of the Capuchins was seated at a large table in the courtyard upon which were scattered numerous fragments of a marble tomb-



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A burial vault beneath the Church of the Capuchins, Rome, decorated with the bones of departed monks of the Capuchin order.

stone. He was attempting to put them together in order to decipher the inscription. The monk told me that he was trying to match the words, and I suggested that it could be perhaps better assembled as a dentist restores a broken plaster impression by regarding the edges of the pieces and trying to fit them where they belonged. The idea was very acceptable and pretty soon we had the entire slab restored.

From Rome I made the trip to Naples and took the excursion to Pompeii. The streets and shops have been restored so that you imagine the place has but recently been deserted. Pompeii was overwhelmed in the eruption of Vesuvius in the year 79 A.D. Herculaneum was destroyed by the hot lava, but Pompeii was preserved by the cinders and

lava dust. You can see in the museum the mummified bodies of some of those who were overtaken and perished. A woman may be seen, well preserved, with what appears to be a towel held to her face in her struggle for air. The streets show the wheel marks where wagons rolled for centuries when Pompeii was a thriving town, and the stepping stones for pedestrians are there, grooved by the scraping hubs.

#### VENICE AND VIENNA

Venice was delightful in January. True, the canals were not filled with singing summer boatmen, but the air was cool and bracing. This



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A street in Pompeii. Vesuvius in the distance.

is more than can be said of these places in the summertime when the powerful aroma of Italian home-life is carried to defenseless nostrils. I fed the doves before St. Mark's Cathedral and visited the dungeons where political prisoners were held and murdered by the Council of Ten. You may yet see the opening in the wall through which bodies were secretly cast into the canal. Lord Byron is said to have slept in one of the dismal cells on the stone floor in order to get "atmosphere."

I left Venice at noon and the following morning was walking in the streets of Vienna. During my stay of a month in Vienna I was in daily attendance at Professor Pichler's clinic, at the Allgemeine Krank-

enhaus. Dr. Pichler is probably the greatest jaw surgeon in Vienna, and I admired him more than any of the men I met on my European journey. He studied dentistry in Chicago many years ago and speaks excellent English. It is interesting to note that he is the only man in that section of the world who does the Brophy operation for cleft palate and harelip. Despite all the major surgery of the head and neck constantly done by Professor Pichler, he does dental work also. He fills teeth, fills root canals and makes plates. It is necessary in Vienna to be a physician before the study of dentistry may be undertaken. There are no specialists in oral surgery as in this country, and each dentist does his own work or sends the surgery cases to another practicing dentist who has exceptional skill. This condition prevails in Europe.

I had already engaged passage for Egypt in order to visit the wonders of the Nile and also Jerusalem, but received word from home to retrace my steps. I returned to Paris, embarked at Cherbourg and before I could realize it, I was back at the chair saying, "It won't hurt a bit!"

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My wandering across the face of Europe for six months I look back upon as one of the achievements of my life. To travel, to visit distant places and see with my own eyes the things I have heard described since boyhood! I have not finished my roaming. To me the greatest part of life is seeing the world and the people thereof—strange faces, strange customs, mysterious lands. Sometimes at night, with my head on my pillow, I lie awake and hear the siren song of the ships that go out to sea. I toss uneasily, for I know that they are calling me and I am not yet ready to go.

Knickerbocker Building.





# DENTAL LAWS

## Summary of Dental License Requirements Throughout the World

By Alphonso Irwin, D.D.S., Camden, N. J.

### NORWAY

Norwegian dentists receive their education at the Government Dental Institute at Christiania. The Institute gives the students the theoretical and practical education necessary to receive right to practise as dentists in Norway. This consists of four parts and brings the student to the point where he can take the dental examination after having gone through courses lasting for three years. The theoretical instruction is given partly at the Institute in weekly lectures and examinations and partly at the University in separate courses. The practical part of the work is given in the various departments at the Institute.

In order to secure entrance to the Institute it is required that the applicant shall have passed the examination in Norway called "Artium" (this corresponds practically to the usual high school training in the United States, with the addition possibly of one year college training), and in certain cases supplementary tests are given in physics. Norwegian subjects who have passed the examination called "Artium," and who have graduated from a dental institute abroad *officially recognized* by the *Norwegian Government*, can be given permission to take the Norwegian dental examination.

The candidates who have passed the examination provided for by the government Dental Institute, after having received a diploma and *promised to practise dentistry conscientiously*, are given the right to practise as dentists. This right to practise includes also the right within certain limits to prescribe from the apothecaries in the Kingdom the medicines which are necessary in their practice. A dentist is obliged to report to the District Surgeon whenever he establishes himself as a dentist in any section of the country and whenever he moves from one District to another. Furthermore he is also obliged before the expiration of the month of March in each year to send through the Public

Physician to the Director for the Civil Medicine Service of Norway a report concerning his activity as dentist in the next preceding year.

According to the Royal Resolution of December 9, 1909, Clause 3, and the Royal Resolution of June 31, 1913, and the Royal Resolution of April 16, and July 2, 1915, the Department of Social Matters can give persons who have not taken the Norwegian dental examination the right to practise as dentists in Norway. Such permission is given only in special cases and in special instances and as a rule is limited to a certain district and for a certain definite period of time. On account of the scarcity of Norwegian dentists which still exists in the Northern and certain parts of the western section of Norway, and on account of the scarcity of assistants in the municipal school dental clinics, certain "Norwegian American," Danish and German dentists have been given a limited license of the kind referred to above.

Applications from foreigners for such permission should be accompanied by detailed information covering education and examinations, certified copies of letters of recommendation and a certificate to the effect that the individual making the application is willing to accept the license limited to that place in Norway which the Norwegian authorities may determine.

Verified January 1st, 1925.

NOTE.—We have in our possession the Dental Reports and Laws, and Pamphlets on the Regulations for Dental Examinations and the State Dental Institute in the official language of Norway. Anyone interested and conversant with the Norwegian language may inspect such documents at our office and take such notes therefrom that may prove helpful to him.

## NOVA SCOTIA

Dental Laws dated 1891, 1900, 1911, amended 1916, 1919, 1925.

English language, dental supervision, registration and examination required. Examinations are held in May and September at Halifax. Matriculation fee \$10.00; examination and registration fee \$50.00.

Dental Board: Doctors W. H. H. Beckwith, President, Halifax, N. S.; E. S. Allen, Yarmouth, N. S.; J. P. Parker, Sydney, N. S.; C. G. McDonald, New Glasgow, N. S.; A. F. Hogan, Weymouth, N. S.; Wm. W. Woodbury, Halifax, N. S.; F. W. Dobson, Halifax, N. S.; A. W. Faulkner, Secretary-Registrar and Treasurer, 69 Gottingen St., Halifax, Nova Scotia.

Requirements: Pre-dental matriculation in arts department of a provincial university; dental degree from a recognized dental college.

Theoretical examinations comprise the subjects of Anatomy,

Chemistry, Physiology, Physics, Histology, Pathology, Bacteriology, Prosthetic Dentistry, Metallurgy, Porcelain Inlay, Crown and Bridge-work, Oral Hygiene, Materia Medica, Therapeutics, Orthodontia, Medicine, Surgery and Anesthetics. Practical examinations usually consist of gold filling, gold inlay, anatomical articulation of set of artificial teeth. Practical tests are subject to change and announcement by the examiners.

Alien dentists, graduates of foreign (dental) colleges, must present their diplomas and licenses and other credentials and pass the required examinations. The Dental Board shall accept persons holding the certificates (of qualifications) of the Dominion Dental Council of Canada for registration without examination, providing all the other qualifications of the Board are met. Credentials recognized by the General Medical Council of Great Britain are accepted. Annual Registration by July 1st. Failure to register for two years automatically terminates licensure. Address A. W. Faulkner, Secretary-Registrar and Treasurer, 69 Gottingen St., Halifax, Nova Scotia.

Verified February 16th, 1925.

#### NYASSALAND

This is a British Protectorate lying along the southern and western shores of Lake Nyassa in South Africa, inhabited almost entirely by native Africans. While British Colonial Dental Regulations are applicable to any colony, it is obvious that they are not enforced here.

#### OAXACA, MEXICO

No official information of recent date has been obtainable from this State of the Mexican Republic. Anyone interested in this section of the country is referred to Mexico and the Mexican Federal Dental law.

In the largest cities of Mexico a professional is usually obliged to pass a local board examination after presenting duly verified vised credentials to the local officials, pay a fee of about \$50.00 U. S. currency, and the local taxes. This information is obtained from official sources in a neighboring state of Mexico, dated May 27, 1924.

#### OHIO

Ohio State Dental Board: President, J. F. McDonagh, West 25th and Detroit, Cleveland, Ohio; Secretary, Ray R. Smith, 205 East State St., Columbus, Ohio; A. H. Breitenwischer, 1547 Nicholas Bldg., Toledo, Ohio; F. C. McKim, Jr., 408 Central Bank Bldg., Marietta, Ohio; C. H. Burmeister, 1015 Union Central Bldg., Cincinnati, Ohio.

*Time and Place of Examination.* The Ohio State Dental Board

will meet for the examination of applicants on the fourth Monday of the months of June and October in the City of Columbus, Ohio.

In June and October the practical examination will be given in the clinic of the Ohio State University Dental College. In June the theoretical examination will take place at the Ohio State University Armory on the University campus, and in October in one of the lecture rooms of the Ohio State University Dental College.

The Board will hold examinations in Practical Operative and Prosthetic Dentistry at the Cincinnati and Ohio Dental Colleges in Cincinnati, at the Western Reserve Dental College in Cleveland and at the Ohio State University Dental College in Columbus, about the first of June of each year. Due notice of the exact dates will be given to the various Deans of the various colleges by the Secretary.

Only senior students, who are assured of graduation, are eligible to take advantage of these examinations. The fee required by law is payable at this time. The grades in this work will not be considered until after the regular examination in June.

#### *Qualification of Applicants.*

1. The applicant must be at least twenty-one years of age.
2. He must be a graduate of a reputable dental college, recognized by the Board.
3. He must furnish a satisfactory certificate of good moral character. (An applicant who has practised in another state must also furnish a certificate of good moral character and ethical standing from the Secretary of his State Board.)
4. He must also be able to present with his application a certificate from the State Superintendent of Public Instruction that he is possessed of a general education equal to that required for graduation from a first-grade high school in this state.
5. If an applicant has been convicted of the illegal practice of dentistry in this state, the Board will refuse him the right of examination.
6. An applicant, to qualify under our reciprocity agreements, must be a graduate of a reputable dental college and must have practised ethically at least five years in a state, territory or district of the United States with which Ohio enjoys reciprocity. He must also file an application with the Ohio Board and receive an endorsement from the aforesaid state, territory or district in which he has practised. This endorsement entitles him to credit for the theoretical examination and it is then necessary for him to take only the practical examination.

*Manner of Application.* All persons desiring to practise dentistry in the State of Ohio must comply with the following rules and regulations of the Ohio State Dental Board:

1. Each applicant must file with the Secretary of the Board an

application (verified by oath) at least ten days previous to the date of the examination; the application to be made out on a form furnished by the said Secretary.

2. A fee of Twenty-five Dollars (\$25.00) must also accompany this application.

3. The remittance must be in the form of a Post Office or Express money order or a New York draft, and should be made payable to the Ohio State Dental Board. (No personal checks accepted.)

*Examinations.* The hours for examinations shall be from 8:30 A. M. to 12 noon, and from 1:30 P. M. to 5 P. M.

The examinations in the following subjects shall be in English (either written, oral or both): Anatomy, Physiology, Chemistry, Materia Medica, Therapeutics, Metallurgy, Histology, Pathology, Bacteriology, Prosthetics, Operative Dentistry, Oral Surgery, Anaesthetics, Orthodontia and Oral Hygiene.

The practical examination shall consist of the insertion of at least one gold filling, one contour approximal amalgam filling, one silicate approximal filling, one contour approximal cast gold inlay, the making of a porcelain-faced crown (Richmond) and the setting up and articulating of a full upper and lower denture.

*Written Examinations.* For these examinations the applicant must furnish pen and ink. Paper will be furnished.

*Clinical Operative Dentistry Examination.* Each applicant must furnish a patient, engine, instruments and all material. A chair will be provided. All cavities to be filled must be selected or approved by the Board, and each member of the Board must be called to inspect and grade the work after each of the following steps:

(a) Preparation of cavity; (b) Introduction and condensation of gold; (c) Completed operation. The Board at its discretion may substitute an additional gold filling in place of an amalgam.

*Clinical Prosthetic Dentistry.* Each applicant will be required to furnish plaster casts for a full denture (both jaws) from impressions taken from the same mouth. Also the bite mounted upon an anatomical articulator, and full upper and lower set of porcelain teeth. He is also required to furnish the root of a tooth and all materials necessary for the making of the "Richmond Crown."

The President of the Board will announce at the time of the Prosthetic Examination the particular steps of this work that all members of the Board will inspect.

Previous to the opening of the examination, the applicant will be furnished with an envelope containing a numbered pledge card, which he must sign. He must then seal the envelope and use the number on the card in place of his name on all examination papers. The envelope must be returned to the Secretary.

Any applicant detected in attempting to give or receive aid, will be dismissed from the room and his work rejected.

*Grading.* An average of at least 75% will be exacted in the theoretical branches, and of 80% in the practical work.

If the applicant should receive a grading of less than 40% in any one subject (granting that his general average would pass him) he must take another examination in that particular subject at the next regular or special meeting of the Board.

An applicant who has practised dentistry ethically for five years, shall be given five points credit and one point credit for each succeeding year of practice. This to apply on general average in theoretical examination only.

*Re-Examination.* An applicant failing at the first examination may be re-examined at "the next regular examination of the Board" without an additional fee, provided he notifies the Secretary by letter at least ten days previous to the examination.

The Board issues no temporary permits to practise dentistry.

RAY R. SMITH, *Secretary-Treasurer*,  
207 East State St., Columbus, Ohio.

A BILL TO AMEND SECTION 1329, AND TO ENACT SUPPLEMENTAL  
SECTION 1323-1 OF THE GENERAL CODE RELATIVE TO  
THE PRACTICE OF DENTISTRY

Be it enacted by the General Assembly of the State of Ohio:

SECTION 1. That section 1329 be amended and to enact supplemental section 1323-1 of the General Code to read as follows:

SECTION 1323-1. During the month of December of the year nineteen hundred and twenty-five, and at each interval of five years thereafter, every licensed dentist shall register with the Secretary of the Board of Dental Examiners his name and office address and such other information as the Board may deem necessary upon blanks obtainable from said Secretary, and thereupon pay a registration fee of \$1.00. On or before the 1st day of November prior to such registration, it shall be the duty of the Secretary of the Board of Dental Examiners to mail to each dentist licensed in the State of Ohio, at his last known address, blank form for registration. In the event of failure to register on or before the 31st day of December of each year in which such registration is required, a fine of \$5.00 will be imposed, and should the practitioner fail to register and pay the fine imposed and continues to practise his profession in the State of Ohio he shall at the end of ten days from said date be considered as practising illegally and penalized as otherwise provided for in this Act. If he suspends his practice he

may be reinstated at any time upon registering and paying the prescribed fee of \$5.00. On or before the 1st day of February following such registration, said Board shall issue a printed register of the names and addresses so received, a copy of which shall be mailed or otherwise sent to each registrant thereon.

SECTION 1329. A person shall be regarded as practising dentistry who is a manager, proprietor, operator or conductor of a place for performing dental operations, or who for a fee, salary or other reward paid or to be paid either to himself or to another person, performs, or advertises to perform, dental operations of any kind, treats diseases or lesions of the human teeth or jaws, or attempts to correct malpositions thereof, or who uses the words "dentist," "dental surgeon," the letters "D.D.S.," or other letters or title in connection with his name, which in any way represents him as being engaged in the practice of dentistry.

SECTION 2. That original Section 1329 of the General Code be and the same is hereby repealed.

Signed by Governor Donahay, April 9th, 1925.

#### NEW OHIO LAW LEGALIZING THE DENTAL HYGIENIST

A Bill to supplement Sections 1320, 1321 and 1324 of the General Code, relative to the practice of dentistry in the State of Ohio by the enactment of supplemental sections to be known as Sections 1320-1, 1320-2, 1321-2, 1321-3, 1321-4, 1321-5, 1321-6, 1324-1 and 1324-3.

*Be it enacted by the General Assembly of the State of Ohio.* Sec. 1. That sections 1320, 1321, and 1324 of the General Code be supplemented by the enactment of supplemental sections 1320-1, 1320-2, 1321-2, 1321-3, 1321-4, 1321-5, 1321-6, 1324-1, 1324-2 and 1324-3 to read as follows:

Sec. 1320-1. No person shall practise as a dental hygienist in this state except a licensed dentist or one who has obtained a license from the state dental board to practise as a dental hygienist as hereinafter provided.

Sec. 1320-2. A licensed dental hygienist may practise in a dental office, public or private school, hospital, dispensary or public institution, provided such service is rendered under the supervision of a licensed dentist of this state; and provided, further, that no dentist shall employ more than one dental hygienist in conducting his private practice.

Sec. 1321-2. Each person who desires to practise as a dental hygienist within this state shall file with the Secretary of the State Dental Board a written application for a license upon the form pre-



scribed and verified by oath. Such applicant shall furnish satisfactory proof of being at least eighteen years of age, of good moral character, possessed of an education equivalent to completion of four years of a first-grade high school of at least fifteen units, as defined in the school laws of this state; further, such applicant shall present a diploma or certificate of graduation from a reputable school, as defined by the State Dental Board, for the training of dental hygienists; and further, such applicant shall pay the examination fee of ten dollars. Those successfully passing such examination as the State Dental Board shall prescribe, shall receive a certificate of registration entitling them to practise as hereinbefore prescribed. An applicant failing to pass the first examination shall be entitled to a re-examination at the next regular or special examination of the State Dental Board without an additional fee; for each additional examination thereafter the regular fee of ten dollars shall be paid.

Sec. 1321-3. The practice of a dental hygienist shall be limited to the removal by mechanical means only of calcareous deposits, secretions and stains from the exposed surface of the teeth and directly beneath the normal free margin of the gums.

Sec. 1321-4. All dental hygienists practising in this state shall, on or before January 1st of each year, pay to the secretary of the State Dental Board a registration fee of one dollar and shall furnish such information as the Board may require regarding their location, and the name of the licensed dentist or dentists under whose supervision they practise. The license of a dental hygienist, who neglects to pay the annual registration fee, as herein provided, may be revoked by the State Dental Board; but the Board may, at its discretion, reinstate a delinquent licensee upon the payment of a fee of five dollars. The license of a dental hygienist shall be exhibited in a conspicuous place in the room in which said dental hygienist practises.

Sec. 1321-5. The State Dental Board shall determine what shall constitute a minimum curriculum for a reputable school for dental hygienists, and shall have the power to examine the course of study, equipment and all facilities to be found in any school for dental hygienists; no such school shall offer a course of less than thirty-two weeks of actual instruction.

Sec. 1321-6. The Secretary of the State Dental Board shall keep a record of all dental hygienists in this state, together with location and supervising dentist.

Sec. 1324-1. The State Dental Board may issue a license without an examination to an applicant who furnishes satisfactory proof of being a graduate from a reputable school for dental hygienists of any state, territory or district of the United States, and who holds a license

from a similar dental board having requirements not less than those of this state, provided no license shall be issued under this section unless authorized by the affirmative vote of all the members of the State Dental Board present at such meeting. Application for this privilege must be made out on the form prescribed by the Ohio State Dental Board, accompanied by a fee of ten dollars and a recommendation from the dental board of the state, territory or district of the United States in which the applicant has practised.

Sec. 1324-2. The provisions of sections 1325, 1326 and 1327 for dentists shall apply with equal force, as far as applicable, to dental hygienists.

Sec. 1324-3. Any person practising or attempting to practise as a dental hygienist in this state in violation of the provisions of this act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to the same penalties provided for the illegal practice of dentistry. Any person employing a dental hygienist who has not complied with all the requirements of the Ohio statutes governing the licensing and practice of a dental hygienist shall be fined not less than one hundred dollars, and not more than two hundred dollars.

Approved by Governor Davis, May 17th, 1921.



# DENTAL ECONOMICS

## Twenty Years' Summary of Finances

By Central State†

THE DENTAL DIGEST has often asked for information regarding dentists' receipts, expenses, time expended, etc., and I am taking this opportunity to give mine. It is not an enviable record, but it will show what may be accomplished by patience and perseverance.

After finishing at the Western Dental College, I began practice with a good wife to keep house for me, a handful of second-hand furniture, about \$500 worth of dental equipment and \$300 in money.

During the years noted below I have owned two homes and one farm, but now I do not own any real estate. I do not believe it is good business for any professional man to keep any property in his own name. At present we rent a seven-room frame house, and I have a three-room office in a brick building.

	Office Income Hours	Gross Income	Office Expense
1905.....	...	\$ 416.00	\$ 273.19
*1906.....	...	405.50	179.16
*1907.....	...	114.25	295.00
1908.....	...	826.10	288.25
1909.....	...	852.70	298.05
*1910.....	...	1,366.00	507.02
1911.....	...	1,433.00	494.86
1912.....	...	1,480.00	502.75
1913.....	...	1,325.00	426.33
1914.....	...	1,111.00	328.73
*1915.....	...	970.00	299.20
1916.....	626	1,320.00	299.50
1917.....	758	1,583.00	418.89
*1918.....	820	1,912.00	*736.32
1919.....	1,030	2,558.60	567.95
1920.....	1,065	2,961.10	570.00

† The name of the writer of this article is known to the editors, but is withheld for obvious reasons.

*1921.....	669	2,037.60	394.59
1922.....	605	1,970.00	390.00
*1923.....	420	1,278.75	287.71
1924.....	550	1,928.05	*469.92

Totals for 20 years...	\$27,848.65	\$8,027.42
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## AVERAGE RECEIPTS FOR SERVICES RENDERED IN 1924

Silver fillings .....	\$ 1.56
Silver fillings, deciduous.....	.58
Gold fillings .....	3.39
Gold inlays .....	7.33
Synthetic porcelain fillings.....	2.84
Cement fillings .....	1.00
Repair fillings and crowns.....	3.29
Cleaning and pyorrhetic treatments.....	1.48
Root canal treatments.....	3.17
Plain porcelain crowns.....	10.00
Seamless hand-carved gold crowns.....	9.88
Bridges, average per tooth, including treatments	10.56
Extractions, average for permanent and deciduous .....	1.26
Vulcanite plates .....	40.00
Vulcanite partials .....	16.66
Vulcanite repairs .....	4.88

## TAKEN AT RANDOM FROM MY 1924 RECORDS I FIND THE FOLLOWING:

<i>Operations</i>	<i>Required Time</i>	<i>Total Receipts</i>
30 extractions .....	8 hours	\$40.00
30 cleanings .....	12 "	40.00
30 silver fillings .....	13 "	43.50
30 gold inlays .....	68 "	223.50
40 gold fillings .....	43 "	135.25
19 synthetic fillings .....	18 "	54.00
16 deciduous fillings .....	3 "	9.25
17 gold crowns .....	60 "	168.00
4 bridges (18 teeth).....	52½ "	190.00
9 canal treatments .....	11½ "	27.65
7 repairs of fillings and crowns .....	9 "	23.00

I try to get three dollars per hour for my services except for extracting. I also add \$1.50 per pennyweight for gold in bridgework.

I have starred (\*) certain years in my first table for the following reasons:

I relocated in 1906 and again in 1907.

In 1910 I began reading *THE DENTAL DIGEST* and through its columns I learned how to make my practice pay better, how to be able to take vacations and, last but not least, how to save something each year, as you will see later.

In 1915 my wife and I left the center of the United States by rail for the Pacific Coast on our first long vacation. We visited Salt Lake City on the way out, fifteen other cities between San Diego and Bellingham, Washington, and on the way home stopped at The Dalles, Oregon, and Denver, Colorado. We walked 300 miles on the trip, did not stop with relatives or friends, were away from home 73 days, and our total expense was \$379.51. Can you beat it?

In 1918 we went into Colorado and walked the heels off our shoes during a seventy-two days' vacation!

In 1921 we visited in Colorado and Kansas City, Mo., for fifty-five days.

In 1923 we spent our vacation in Minnesota, where I got my fill of fish for once! We were away from home fifty-seven days.

In 1918 my office expense took a jump because of settling a malpractice suit that went against me on account of a poor lawyer. This suit cost me more than twenty years of indemnity insurance. If you haven't insurance, don't delay in getting it, as you may not get off so lightly as I did. The woods are full of people who have nothing, but who are just waiting for some excuse to try, by the help of some "shyster" lawyer, to get some money which they have not earned.

In 1924 my office expense took another jump on account of my taking a State Board at a distance.

#### MY FINANCES DURING THE YEAR 1924

	<i>Received</i>	<i>Paid</i>
House rent (7-room frame)....	.....	\$ 147.00
House furnishings .....	.....	13.15
Water .....	.....	12.00
To wife for groceries and personal needs .....	.....	360.00
Clothing .....	.....	27.32
Doctor and medicine.....	.....	5.65
Life insurance dividend.....	\$ 9.12	.....
Accident insurance .....	.....	13.00
Stamps .....	.....	2.00
Church and charity.....	.....	20.75

Street car and taxi.....	.....	1.80
Amusements .....	.....	12.85
Miscellaneous .....	47.40	93.92
Securities purchased .....	.....	1,001.80
Interest from securities.....	505.20	2.83
Dental office .....	1,928.05	469.92
Automobile expense .....	.....	127.14
Camping equipment .....	.....	23.95
<hr/>		<hr/>
Totals .....	\$2,489.77	\$2,335.08

Most of us make a lot of money during our active years, but it is dissipated by extravagance and careless investment. I cannot understand why we as a profession are such extravagant spenders. As one of you, I know my money does not come easily (except interest), and even I spend too much in various ways. I guess my weakness is to possess the good things that money will buy.

It is, I believe, a gift, born with some, to make money and with others to save it. Otherwise, how can some make money so easily and others save it just as easily, while still others can neither make nor save anything? By keeping account of every expense one is less apt to spend recklessly. If a man never saves, it isn't hard to guess how he will finish his life, as there are plenty of object lessons all around us, due to folks not saving, if we only use our eyes and profit by what we see.

On the other hand, I would not have any man spoil his life by being stingy. There is a wide difference between stinginess and economy. The latter deserves and should win all men's admiration. There is none so rich that he can afford to be wasteful, and none so poor that he need be stingy.

It is our duty to those dependent upon us to save in proportion to our earnings. I am not altogether to blame for my lack of sympathy for "down-and-outers," because quite too often they were living in times past at the top of the pile while I was down at the bottom scratching.

One good thing I did when young was to bite off all the old line life insurance that I could pay for. During money panics life insurance companies always have money to loan their policy holders, and insurance money is a good thing for wife after we pass on.

A certain life insurance company kept tab on 100 healthy men from the age of twenty-five to the age of sixty-five. At the end of forty years 36 of them were dead, one was very rich, four wealthy and independent, five still supporting themselves by work, and 54 were totally dependent upon relatives, friends or charity.

In conclusion I should like to say that aside from dental practice I have no other income worth mentioning, except from securities, all of which have been acquired during the past fourteen years. During the same years I have lost a total of \$1,104.32 in six speculative ventures.

## PRESENT FINANCIAL STATUS

Office equipment invoicing at (sale value uncertain) .....	\$1,500.00
Paid up Mutual Life Insurance.	\$2,000
Municipal Bonds (bought below par) .....	1,000 (paying 51½%)
Municipal Bonds (bought at par) .....	500 ( " 6%)
1st Mortgage on a Farm .....	3,850 ( " 6%)
Savings and Loan Stock .....	1,300 ( " 6%)
Building and Loan Stock .....	200 ( " 7%)
Investment Company Bond .....	500 ( " 7%)
Title & Trust Company Bond ..	500 ( " 8%)
Stock Land Bank Bond (purchased in 1924) ....	1,000 ( " 5%)
Bldg. Loan and Savings Asso..	298 (cumulative)
Cash on hand .....	875
<i>Total</i> .....	12,023

From this table you will see that I am not a money-maker, but a saver. Any dentist who is both ought to do much better. If I had allowed myself to be carried away with any one "sure thing" investment, my losses might have been greater.

The only liability that I have is an automobile which has been run 12,000 miles. I am beginning to doubt the wisdom of this purchase two and a half years ago.

Thrift, if persisted in, will enable us to accumulate a sufficient fortune to maintain us and our families in comfort and peace until the end of our days. However, I have learned that we cannot practice thrift by ceasing to spend money; but we can practice thrift by regulating our lives so as to eliminate waste and also by spending prudently and by saving wisely. Never buy anything until you can afford it! Do not care what your neighbors say or do! Remember what happens to 54% of the people!

Our lives are just what we make them. We do not have to run into debt so as to walk out, worry or rush from one half-sensed pleasure to another, crowd our lives with extravagant ugliness and exist amid hateful surroundings if we really do not want to. If we would cultivate



a life of simplicity and peace, we should find them the cheapest things in the world, and more of us would do so, if we were not afraid of public criticism. Live your own life right! Unfortunately, most of us do not much more than begin to learn how to live when we have to die.



*Don't forget the  
A. D. A. Meeting in  
Old Kaintuck  
Sept. 21-25, 1925  
Good Hotels  
Good Roads  
Good Weather  
and  
C. N. Johnson  
Presiding*



## PRACTICAL HINTS

This department is in charge of V. C. Smedley, D.D.S., and George R. Warner, M.D., D.D.S., 610 California Building, Denver, Colorado. To avoid unnecessary delay, Hints, Questions and Answers should be sent direct to them.

NOTE—Mention of proprietary articles by name in the text pages of the DENTAL DIGEST is contrary to the policy of the magazine. Contribution containing names of proprietary articles will be altered in accordance with this rule. This Department is conducted for readers of the DENTAL DIGEST, and the Editor has no time to answer communications "not for publication." Please enclose stamp if you desire a reply by letter.

### *Editor Practical Hints:*

As editor of Practical Hints for the DENTAL DIGEST I am asking your advice about a case I have. Patient a Miss H., about thirty years old. Had No. 32 extracted several years ago after it had abscessed, and since that time a small hard pimple would come just distal to site of third molar about twice a year and point, and when opened have a drop of caseous discharge. First picture failed to show anything, then one back including the anterior border of the ascending ramus disclosed a cyst.

As first molar was missing and second molar was vital and seemed all right to me, I made a removable bridge with cast gold saddle and porcelain dummy which patient wore with entire satisfaction. As she was going to Kansas City on a vacation I advised her to see an oral surgeon in regard to the cyst. She was operated on and was under treatment nine weeks, then referred back to me for packing. I have just discontinued packing as it is now completely healed.

Now for the part I want advice through the DIGEST.

They started the operation by extracting the second molar, thus destroying the bridge work of which my patient was proud, and when she said "what'll I do?" they said, when you get well have your dentist make another removable bridge. She has thin tissues showing the loss of bone and teeth on the right lower and has all the other teeth in place. The scar tissue from the operation is tender and there is no ridge to build to. I have made such restorations by casting saddle and attaching to second bicuspid, then running a lingual bar around and clasping a tooth on the opposite side to balance it, but my success with such restorations has been in direct proportion to the pride of the patient.

Do you think it was necessary to remove this second molar? Would

you advise making a restoration at all at this time? If so, what type would you advise?

C. E. K.

ANSWER.—The situation with your Miss H. is certainly very unfortunate. I shall attempt to answer your last question first. My experience has been much the same as yours with this type of restoration. This is the least favorable space to supply with a satisfactory removable denture.

I know of no better method where the ridge is flat and poorly defined and the tissue sensitive, as in this case, than to secure a reciprocal anchorage on the other side of the mouth with a lingual bar and a crib or whatever other type of clasp or attachment the condition and position of the teeth on that side will permit. Where the ridge is well defined and the bite is not too long quite satisfactory unilateral cases may frequently be made by engaging both bicuspid or bicuspid and cuspid on the one side with a rigid clasp, or clasp and crib construction.

I hesitate to answer your first question for the reason that it is so easy for any one of us to misjudge the other fellow; but if this operation was started, as you state, by the extraction of a second molar, I cannot but feel that the oral surgeon made an inexcusable blunder, and performed an operation on this patient that the condition would not in any way warrant or justify. If, however, he started the operation in the third molar region I can see that it is conceivable that he might have found the systic or infectious area to be much more extensive than is apparent on the x-ray. If there was a carious or diseased condition of the bone which required this extensive cutting and removal of tissue for its elimination, then his work may have been done skillfully, intelligently and well.

I hope for the sake of all other members of suffering humanity who may come into his hands that this is true, but I cannot but feel, as I judge that you do, that whoever this oral surgeon is and whatever his reputation and training may be, he certainly dubbed this case and inflicted upon your patient an unjustifiable and irreparable injury, not only by the removal unnecessarily of the second molar, but by a very excessive removal of the bone of the mandible as shown by the post-operative x-ray.—V. C. SMEDLEY.

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*Editor Practical Hints:*

Can mercury from amalgam cause systemic disturbances?

Patient, lady, 37 years of age, came to have several cavities filled. Has had boils for two years—intermittently. Her M.D. suggested that

the use of amalgam was to be discouraged, was ill-advised and the possible cause of boils—mercury poisoning her system.

Counted fifteen amalgam fillings, two gold inlays, and one gold filling (gingival lower second bicuspid); this had an amalgam patch. The gold was oxidized. I brushed the oxide off and did not find any returning after 20 hours.

Do you believe or have you ever found that mercurial poisoning can come from the amalgam fillings?

Years ago the Homeopaths believed that this happened.

Am treating for pyorrhea. I believe this is her trouble.

W. B. S.

ANSWER.—It is my opinion that the mercury in amalgam cannot cause systemic disturbances. I am quite familiar with the theory of the Homeopaths that mercury in amalgam causes systemic poisoning, but in the many patients which I have seen who have had their mouths filled with amalgam fillings I have never seen a case of mercurial poisoning, and when one thinks of how much heat it takes to drive the mercury out of the amalgam or what strong acid it takes to dissolve amalgam it is pretty hard to imagine that the mercury in amalgam could be separated from the alloy by any condition which exists in the mouth.

Boils are an evidence of disturbed metabolism, and might be caused by many different things; prominent among these is focal infection; therefore it would be advisable to not only clear up the periodontoclasia but also eliminate any non-vital teeth with evidence of periapical infection.—G. R. WARNER.

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#### *Editor Practical Hints:*

I have a lady patient, 30 years of age, who had a very bad case of eczema a year ago. Neck, face, breast and arms broke out, swelled, and exuded watery serum. Considerable pain. She has just had another spell of it. Eczema was more general over the body and swelling worse than before. Eyes swelled shut and neck as large as the face.

About a year ago she had her teeth x-rayed. Showed what they pronounced a pulpstone in upper left first molar. Tooth vital and gives no trouble.

A dentist in Pueblo suggested that the eczema might have been caused by the pulpstone.

Will you kindly outline briefly the origin and development of pulpstone, and say whether you think there could be any possible connection between a pulpstone and the eczema described.

H. M. T.

ANSWER.—In reply to your query in regard to the cause of eczema,

would say that I cannot see any probable connection between pulp nodules and eczema.

I have consulted the best dermatologist in this city and he says that pulp nodules could at the most be only a contributory cause of the eczema.

Dr. E. W. Spencer of Pueblo had a case of pulp nodules some two years ago which were the cause of a tri-facial neuralgia and they might possibly be a cause for indefinite pain about the head or neck.

In looking over the Dental Index I find no additional information on pulp nodules from 1911 to 1920 inclusive, so, very little has been written on the subject.—G. R. WARNER.

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*Editor Practical Hints:*

In making the mandibular injection I have often noticed an occurrence which I cannot understand. After making the injection (and also injecting the long buccal) and waiting the required twenty minutes, the patient will admit of partial but not complete anesthesia on that side of the mandible. If I proceed to extract the tooth anyway the patient will immediately after the extraction remark that the anesthesia has become very profound. I have tried to figure this out many times but I can't see any reason for it unless the movement of the roots of a molar causes a pressure on the mandibular canal. If you will explain this to me I will appreciate it.

W. M. B.

ANSWER.—No doubt the phenomena you describe can be explained by the fact that in many individuals from thirty to forty minutes are required before the maximum of anesthesia occurs in the areas most distant from the nerve-block injection.

There is probably also a psychological factor governing. If the patients are more or less fearful of being hurt by the extraction they may not give an absolutely correct report of the sensation of anesthesia. In other words, they might in their anxiety to be sure that they are not going to be hurt, report that there is still sensation on that side of the mandible, whereas, after the tooth has been extracted without pain the state of anesthesia might be exactly the same, and with the fear of being hurt removed complete anesthesia might be reported.—V. C. SMEDLEY.

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*Editor Practical Hints:*

Would you kindly tell me if ordinary oil, with perfume added, would be just as good as "Stero Oil?" If so, what kind of perfume would you suggest?

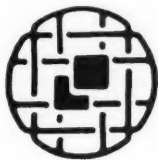
We use this oil for the handpieces, therefore plain oil would not be advisable.

Kindly send us a little information regarding this question, for which we would be much obliged.

E. R. V.

ANSWER.—I do not know what "stero oil" is made up of, but I am of the opinion that ordinary oil with perfume added would not answer exactly the same purpose. Stero oil seems to be much more volatile than ordinary lubricating oil, as though it had alcohol, ether, benzine or something of the kind added to the oil ingredient.

My partner, Dr. Withers, has done some experimenting, and with the addition of benzine and oil of wintergreen to engine lubricating oil he thinks the result answers the same purpose at very much less expense. He didn't put any definite proportions, but just added benzine and wintergreen until the consistency looked and smelled about right.—V. C. SMEDLEY.



## CORRESPONDENCE

### ARE THERE ANY LEFT-HANDED DENTISTS?

*Editor Dental Digest:*

The other day I was asked if there were any left-handed dentists in the world. Never having met any "port-siders," I am asking you to call the roll, via THE DIGEST, of the dentists who are so fortunate, or so afflicted, whichever it may be.

Possibly an article in THE DIGEST telling how they make out with right-handed chairs, cuspidors, engines, etc., and the remarks their patients make might prove interesting.

J. W. B.

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Greensboro, N. C.

*Editor Dental Digest:*

I filled the four lower molars for my little girl when she was eighteen months old and pulled the two second molars not long ago when they got loose.

The fillings had been in for nearly ten years.

A. H. JOHNSON.

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Hannaford, N. D.

*Editor Dental Digest:*

In the April issue of THE DENTAL DIGEST I noticed the letter of Dr. Reelhorn of Ohio telling of filling a tooth for a child 19 months old and you thought that was a record for age. Last March I filled a tooth with cement for a child 17 months 13 days of age and the cavity was quite large and so deep that I was afraid of an exposure of the pulp. It was an upper first molar and the child had only its first molars and eight incisors. Can anyone beat this?

O. H. HOFFMAN.

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Clinton, Iowa.

*Editor Dental Digest:*

Speaking of young patients, I have just had one.

Lanced an apical abscess on an upper right lateral incisor for a thirteen-months-old baby. She smiled for me afterwards, too!

RICHARD A. EMMONS.



Patchogue, N. Y.

*Editor Dental Digest:*

IN THE DIGEST for April under the title "Fisherman's Luck" you show some hook! How about the enclosed roots of a lower left third



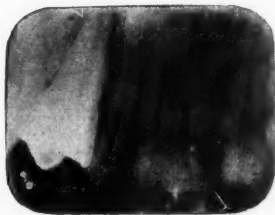
molar? I had to split the crown and then unhook them. Note the frailness of these roots as compared to Dr. Case's.

H. M. DEMAREST.

Elma, Wash.

*Editor Dental Digest:*

I am enclosing all I could get for you of what I consider a dental



freak. It is an upper right double central incisor tooth of one of my regular patients. All the rest of the teeth are perfectly normal except the upper right cuspid which is in malocclusion buccally.

This might be of interest to you and the craft.

M. C. MELCUM.



# DENTAL SECRETARIES and ASSISTANTS

## Secretaries' Questionnaire

All questions and communications should be addressed to Elsie Pierce, care of THE DENTAL DIGEST, 220 West 42nd Street, New York City.

*In the near future an x-ray equipment is to be installed in our office, and I have been told that I shall be expected to assist with this work. I am writing you for information. Does the law permit me to take pictures? Where can I find out how to develop and mount the pictures when taken?*

T. B., Ind.

The laws of various states differ, but to the best of my knowledge no state permits a person who is not licensed to use an x-ray machine. I suggest that you apply to your local Board of Health for the information as to the requirements necessary.

Manufacturers of x-ray equipment are very glad to furnish purchasers of their equipment with instructions regarding the developing and mounting of roentgenograms, the care of the equipment, solutions, etc. If there are facilities in your office for the establishing of a well-equipped dark room, the work will be quite easy and pleasant.

Supplementing the information given to you by the x-ray equipment manufacturer I suggest that you join a class of instruction such as is given by the Dental Assistants' Society to which you belong. These classes not only comprise instruction in developing and mounting, but also show how to keep records and files in order and many other points very valuable to you.

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*I have lately taken a position with a dentist who does a great deal of extracting. In my former position the dentist did not do any extracting, so I find myself a bit puzzled as to just what to do for the comfort and care of the patient and assistance to the doctor. Dr. B. is one of those dentists who think that one does not need any instruction; in fact, it annoys him to have to tell me what to do. I want to be a real help to him and the patient and so I ask you for information. Please help me.*

F. McC., Conn.

Patients who come to the office knowing they are to have teeth extracted are usually badly frightened and highly nervous. Those who are to take gas fear that they may not waken again or that something terrible which they cannot explain will happen to them while they are unconscious. Those who are to have a local anesthetic fear the prick of the hypodermic needle or that it will hurt anyway.

Your first mission is to be kind and sympathetic and to reassure them in a quiet, cheerful manner. By this I do not mean that you should laugh and joke with the patients, but you may do much to allay their fears by looking pleasant and in a few words may explain to them that while the ordeal may not be agreeable to contemplate, it is not nearly so bad as pictured or as they anticipate, that they are in good hands and everything will be done for their comfort and safety.

Prior to placing the patient in the chair, have all things at hand that may be needed for the operation. Do not make a display of your preparations and keep all instruments, etc., under cover of sterile towels. All instruments that may be needed should be on a tray; if a local anesthetic is to be used, the tray for its preparation should be all set with everything needed; have in readiness sponges, swabs, sutures, sterilizing agent, smelling salts, aromatic spirits of ammonia or other stimulants with glass, spoon and cold water.

When you have placed the patient in the chair, make her as comfortable as possible; loosen all tight clothing, collar, etc. Spray the mouth with an antiseptic solution or have her gargle and wash out the mouth with the solution. Adjust the cover-all or apron; if a rubber one is used, place a linen one over it or cover with a towel. Place a towel or napkin around the neck to catch any blood that may dribble from the patient's mouth. It is also well to tie a towel over the hair or use the linen cap provided in some offices. Wipe the lips and around the mouth with an antiseptic solution or alcohol, and the patient is ready for the doctor.

Some operators want the assistant to keep the field free from blood by frequent swabbing or flushing with warm, sterile water. Sometimes it is necessary for her to hold the cheek or tongue retractor in place. Whatever is needed, try to anticipate and be ready to do. Protect the hands with sterile rubber gloves, if you assist the doctor in this way.

When the operation is finished, the patient is once more entirely in the hands of the assistant. A spray of warm antiseptic is refreshing. Wipe the face free of all blood stains. Help the patient adjust her clothing and take her to the retiring or dressing room where with sterile comb and brush, powder, etc., she can repair the damage to her toilette and rest, if necessary.

Be sure the patient is given directions, as prescribed by the doctor, for home care. Often a busy dentist forgets to give these instructions. While extraction cases are all very similar in routine, pay close atten-

tion to the methods used by the doctor and be at all times prepared to follow his technic.

Many exodontists at the present time will not employ an assistant who is not a trained nurse or who has not had special training in surgical assistance. From the doctor's point of view the reason is obvious; again it is the old story that education makes for efficiency.

I suggest that you avail yourself of any course in first aid that may be obtainable in your locality. This knowledge will be of very great value to you, should emergencies arise.

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I have been asked many times if I thought a uniform was necessary for the dental assistant. May I emphatically say that I believe there is nothing which lends more dignity and charm to the appearance of the assistant than a spotless white uniform, including white shoes and stockings. A dainty, fresh cap completes the picture. What can be more out of place in a dental office than chiffon frocks and silk party dresses, satin slippers, glittering beads and other gewgaws. For the dignity of the service I hope the day will come when a white uniform will be obligatory for every dental assistant.

ELSIE PIERCE.

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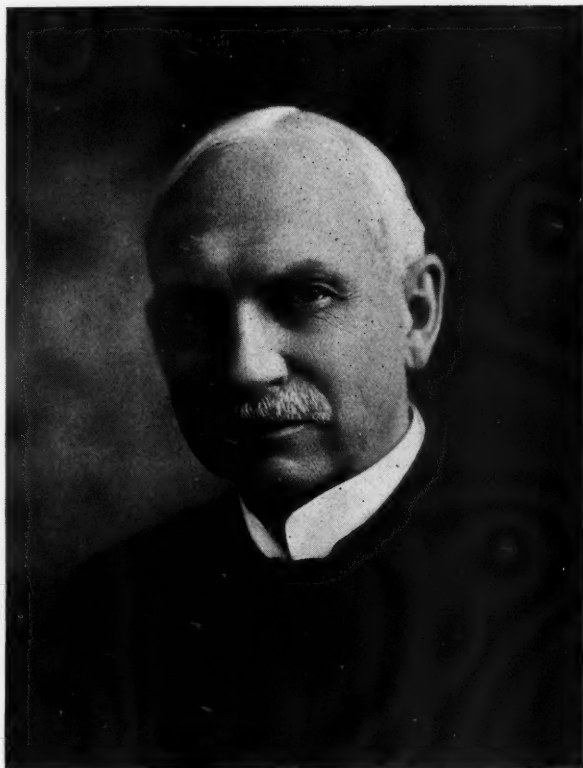
## A Notable Dinner

On the evening of May 16th at the Hotel Astor, New York City, the Educational and Efficiency Society for Dental Assistants of the First District, New York, held their fourth annual dinner, at which Dr. C. N. Johnson, President of the American Dental Association, was the guest of honor. The foregoing is a simple statement of fact that does not contain for the casual reader anything extraordinary, because dinners to Dr. Johnson, the beloved dean of American dentistry, are so frequent, since groups of dentists all over the country vie with one another in their efforts to honor themselves through honoring him; but this dinner was unusual in many ways and was one of the most delightful from every standpoint that it has been our privilege to attend.

In the first place, it was managed from beginning to end by a group of young ladies, all members of the Society and all working dental assistants in the offices of New York dentists. It was given in the east ballroom of the Hotel Astor and every feature of the dinner, including the decorations, the excellent menu and the thoroughly

enjoyable program, which was carried through from beginning to end without the slightest hitch, would reflect great credit on the most experienced group with years of successes to their credit.

When one realizes that this Society is but four years old and that it started under very discouraging handicaps, the healthy growth and



Sincerely yours  
C. H. Johnson

development shown are little short of marvelous. While the success of any group movement depends on the loyal cooperation of its various members, it would not be overstating to say that the success of the Educational and Efficiency Society for Dental Assistants of New York

is due in large measure to the vision, the untiring efforts and the genius for organization possessed by its founder and President, Juliette A. Southard.

The carrying out of the formal program of speeches and presentations was done in a very efficient and delightful manner by Miss Anna H. Sykora, Treasurer of the New York organization and General Secretary of the American Dental Assistants Association, as Toastmaster. Miss Sykora was an ideal Toastmaster and was a refreshing innovation. She introduced each speaker with a few well-chosen phrases and did not feel it incumbent on her to make a speech for every other speech given. In every way Miss Sykora conducted herself like a veteran of the most approved type, but we are reliably informed that this was her first experience. We commend her to future dinner committees.

The dinner opened with the Pledge to the Flag and the singing of the Star Spangled Banner led by Miss Emily Wiss.

After the delicious repast a greeting to the guests and visitors was extended by Miss Agnes MacNeill, Vice-President of the Educational and Efficiency Society, in a very acceptable manner. Dr. Leuman M. Waugh responded for the Honorary Committee and his address, which was one of the best delivered, lauded the spirit shown by the young ladies and brought out much of the excellent work done by the Dental Assistants Society and was brought to a close by a very fitting tribute to Dr. Johnson, the guest of honor. Dr. S. C. D. Watkins responded for New Jersey with a prepared paper; Dr. Henry W. Gillett responded for the New York dentists in his usual gracious manner; and Miss Jessie C. Ellsworth of Chicago, President of the Chicago Dental Assistants Association and first Vice-President of the American Dental Assistants Association, gave an excellent presentation of the work and ideals of the Society at large and the debt that the young ladies owe to Dr. Johnson for his unfailing interest and counsel. Miss Ellsworth's talk was very well presented and all who heard her could not help but be struck by the thought that so long as young women of her type were in positions of responsibility in the Society the future success of the movement was guaranteed.

Dr. H. E. Friesell of Pittsburgh was down for an address, but was unavoidably prevented from attending the dinner.

Miss Juliette A. Southard, President of the New York organization as well as President of the American Dental Assistants Association, responded to the toast *Our Friend*, which, of course, referred to Dr. Johnson, though she very generously included other friends of the Society as well.

Miss Southard voiced her heartfelt gratitude for the cooperation and good counsel which Dr. Johnson had always offered in unstinted

measure and spoke of the incalculable value of his influence in the affairs of the Society, both local and national. When Dr. Johnson rose to speak, there was a spontaneous ovation and it was easy to see that he had not only the admiration and respect but the affection of all present.

By way of introduction Dr. Johnson spoke of having been associated with the dental assistants' movement since early in its inception and that after careful and deliberate study he was prepared to state that, without any exception, he considered it the most important and beneficial development for the betterment of dentistry of which he had any knowledge. He declared that he was a better dentist and a better man because of his work with the Dental Assistants Society



JULIETTE A. SOUTHARD

President, American Dental Assistants Association.

and that, without exception, all of the men who had cooperated were benefited in like measure. This is an extremely important statement coming from such a man, and it were well if the few who still hold aloof would give this matter serious thought.

Dr. Johnson said that, as service and loyalty were the guiding principles of the dental assistants' organizations, he had written out some thoughts on the *Loyalty of Service*, which follow:

#### THE LOYALTY OF SERVICE

The incentives behind every activity of life will vary according to the individual and his point of view. Every man seeks happiness in his own peculiar way, and the fact must be very apparent that many of them do not seek it in the most effective way. A relatively large number seek it through the medium of money, which after all need



not be considered such an entirely unnatural incentive in view of the fact that money secures for us so many of our material necessities and comforts. But man is a grasping animal—give him one comfort or one luxury and immediately he wants another. He is never satisfied.

The trouble is that most men are seeking material comforts, which in themselves are seldom satisfying. Too many men miss the best things in life through a wrong point of view. They are constantly reaching out for the glittering bubble while the real substance of things is hanging well within their range.

And so it is in our daily work; we do not get the most out of it when we labor merely for the wage rather than for the achievement. Work for the love of it is seldom wearying, but the burden of toil for the dollar becomes at times almost nauseatingly exhaustive. There is no duller occupation in human experience than the mere process of piling up the dollars. And yet this is usually the *summum bonum* of the ordinary business man's life. Sometimes he succeeds and sometimes he does not, but even if he succeeds, unless he develops a vision beyond the making of money, he gains very little happiness from the process. And if he fails, he has only the bitter dregs of disappointment and defeat as his unfortunate portion.

With a professional man it is different. Even if he fails to accumulate a fortune, even though he may be obliged to count the very pennies to see how far they will go, he still has the solace of a real reward embodied in the satisfaction of human service. Money cannot bring to any man's heart the glow that comes from the consciousness of having relieved human suffering, and it is the blessed heritage of the professional man to witness day after day the drawn face of agony change to the softened lines of relaxation and relief. Money cannot buy happiness, but service brings it to our very door; and thus we see that the real reward of human endeavor is for the most part in the joy of actually doing the work rather than in the material reward it brings.

To relieve or prevent pain is infinitely more satisfying than to pile up wealth. To see the smile on the face of a little child, a smile where there had been a tear; to hear a laugh instead of a cry, a shout of joy instead of a shriek of suffering; to reach down into the nethermost depths of the Gethsemane of misery and lift humanity into the dawning of a brighter day—all of this is better than to hoard the riches of a Midas or to wield a scepter over the material destinies of men.

Service is the great panacea for the ills of human kind. It is the promise of the present and the hope of the future. It makes of the pauper a prince and of the maid servant a queen. It chastens and dignifies those who serve as well as those who are served, and it makes all the world a common kin. Service is the one supreme achievement,



the triumph of the human race. It lights the way in the darkest hour of dread and doubt and plants a flower where otherwise a noxious weed would grow. Service sanctifies the soul and changes men into gods and demons into saints.

If all the peoples of the earth could see the sublimity of service, it would cause a radiant glow over the sons of men and make of earth a heaven below.

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After Dr. Johnson's address, Miss Jean Tallaksen, Secretary of the Educational and Efficiency Society, presented to Dr. Johnson a handsomely bound book containing a certificate of Honorary Membership and the signatures of the members.

Miss Emily Campbell, member of the Board of Trustees of the American Dental Assistants Association and Director of Class Work in the Educational and Efficiency Society, paid a tribute to the instructors who had so unselfishly given of their knowledge and skill for the betterment of those who took the various courses, and then introduced Dr. Henry Fowler, the first Honorary Member and instructor in the class of Public Speaking and Parliamentary Procedure.

Miss Mae Bennett, on behalf of the members, presented President Juliette Southard with a beautiful basket of flowers and a platinum brooch set with a sapphire.

After the close of the program the following guests were introduced by President Southard:

Miss Katherine Morris, President of the Assistants and Secretaries Association of Maryland.

Dr. Anna V. Hughes, Director of the School of Hygiene, Columbia University.

Miss C. Redefers, President of the State and of the New York City Dental Hygienists Associations.

Dr. F. C. Royce, President of the Second District Dental Society, New York.

Dr. C. M. F. Egel, Westfield, N. J., Ex-Chancellor American Dental Fraternity.

Dr. F. L. Lum, President of the New Jersey State Dental Society.

Dr. H. L. Wheeler, who was asked to say a few words for the members of the dental profession who had lectured to the Society during the past season.

Regrets were read from Drs. H. J. Burkhart, Thos. J. Barrett, Edward C. Kirk, F. T. Van Woert, Jas. W. Canaday and W. J. Tuckfield of Australia.

And so an enjoyable evening ended. Too much praise cannot be

given to the Dinner Committee, of which Miss Agnes MacNeill was Chairman, and it is our candid opinion that dental societies in the vicinity of the City of New York could greatly improve their dinners and luncheons if they would let the dental assistants plan and buy them.

## Meeting

OF THE

EDUCATIONAL AND EFFICIENCY SOCIETY FOR DENTAL ASSISTANTS,  
FIRST DISTRICT, NEW YORK

The May meeting, for members only, was well attended and was presided over by Juliette A. Southard, President. The officers, the chairmen of the standing and special committees, the director of the Clinic Club, the director of classes and the librarian each presented her annual report, the whole reflecting much progress and achievement by the Society in the past year.

A resolution reducing the membership fee from \$10.00 per year to \$6.00 per year (\$5.00 for membership in this organization and \$1.00 for membership in the American Dental Assistants Association) was voted upon and passed by the members present, and another resolution, electing Dr. C. N. Johnson an honorary member of the Educational and Efficiency Society for Dental Assistants, New York, was also passed. Dr. Johnson has again and again proved himself the staunch friend of the dental assistant and has done much to lend her encouragement in her efforts to raise the standard of her calling and to further her progress.

The election of officers for the ensuing year was in order at this meeting and the members nominated at the April meeting were voted upon and the following were elected and installed in office: President, Juliette A. Southard; Vice President, Agnes F. McNeill; Secretary, Jean Tallaksen; Treasurer, Anna Sykora; Third Member, Executive Committee, Maude Sharpe; Fourth Member, Martha Hall. Delegates and alternates were elected to represent the Society at the Convention of the American Dental Assistants Association to be held in Louisville, Ky., in September, 1925.





## EXTRACTIONS



No Literature can have a long continuance if not diversified with humor—ADDISON

Now Niagara Falls are lit,  
Where shall honeymooners flit?

(As the Entomologist sees it)—  
"Feminine fashions are starving the poor  
moths to death. Wow!"

In the beginning all was perfect.  
There was a garden, but no hose was  
necessary.

(Lady)—Why have the monkeys been  
let out of their cages?  
(Zoo Attendant)—Holiday, Mum.  
This is Darwin's birthday.

A city person is one who thinks a  
circular saw is a collar the laundry has  
worked on.

"Say it with flowers"—the florist says,  
With which I quite agree;  
"With candy"—says the candy man,  
Which also well suits me;  
But really it matters not  
With what we make our vow,  
Should it be candy, flowers or books,  
Just so we make it now.

(Irate Father)—Young man, why do  
I find you kissing my daughter?  
(Young man)—I guess, sir, it's be-  
cause you wear rubber heels!

(Joke)—A man sweating inside a  
heavy coat and thinking he has more  
sense than women!

It's time to read the Summer folder on  
where to speed to find it colder;  
To con its lore, so well reminding of  
silvery shore and trails a-winding,  
Of scented pine and singing rill, and  
air like wine on breezy hill,  
Of lake and mead and sunset view—it's  
time to read, and so you do.

It's time to write (it is the custom) of  
things that bite and sting, dad-bust  
'em!

Of sunburnt nose, and ants that walk  
us, and crazy crows in sunrise caucus;  
Of snakes and skeets, of frogs that  
croak, of tin-can eats and poison oak—  
It's time to write of all that crew. I  
hate to, quite, but so I do.

(Little girl watching painter in art  
museum copying a masterpiece)—Will  
you please give me the old one when  
your new one is finished?

A great Congregational preacher  
Told a hen: "You're a wonderful  
creature."

And the hen, upon that,  
Laid three eggs in his hat,  
And thus did the Henry Ward Beecher.

Many a young man visits the three-  
ball merchants merely to pass the time  
away.

We know a man who grieves because  
His lawn is brown and bare,  
Good Luck it was that made him pause  
With energy to spare.  
For if the grass once starts to grow  
He'll rise at rosy dawn  
And no more comfort will he know,  
He'll have to trim the lawn.

The old saying about "a man hiding  
behind a woman's skirts," is no longer  
any good!

### HOW HE "ARRIVED"

There was a youth whose name was  
Riggs, and he was beastly poor; all day  
he herded geese and pigs upon a lonely  
moor. His ragged coat behind him  
streamed, his hat was quite a shame;  
yet ever as he toiled he dreamed about  
the heights of fame. Some day he'd  
walk those summits high, his head  
among the stars, with coin to buy the  
choicest pie, the worthiest cigars. While  
others tripped, for hours on end, the  
light fantastic toe, he made some noble  
book his friend, and idleness his foe.  
O'er volumes propped upon his knees  
he pored the night away, and he in-  
vented a disease that bears his name  
today. Upon his bust there'll be a  
wreath while halls of fame abide, be-  
cause he has to human teeth a malady  
supplied. In his old age he basked at  
ease, his days were calm and sweet;  
the royalties from his disease kept him  
in Easy street. The dentists of this  
land now drive their costly buzz-buzz  
gigs, and evermore, while they're alive,  
they bless the name of Riggs. And all  
the druggists deal in tubes of dope de-  
signed to kill the germs within the  
mouths of rubes who have Riggs's patent  
ill. And thus we see how one poor lad  
arose from low estate to gather in the  
helpful scad and rank among the great.  
Boys do not rise to shining heights by  
running off from school, by spending  
half their days and nights in playing  
games of pool.—Walt Mason.

## DIETETICS and HEALTH

### Fish a Useful Form of Food

While the popular idea that fish is "brain food" has been exploded, recent investigations have shown that sea food possesses nutritive properties hitherto unsuspected. They have shown that proper diet should contain sea food at regular intervals, for the regular consumption of good ocean fish protects us from goiter, many eye troubles and rickets. It also furnishes valuable proteins and fats which are easily digested and assimilated and which build up the body and keep us fit.

For more than a hundred years, for example, the therapeutic value of cod liver oil has been recognized. Only in the past fifteen years, however, has it been known that this oil owes its nutritive and therapeutic properties to its high fat-soluble vitamin content. Cod liver oil has been shown to have at least two hundred times as high a fat-soluble vitamin content as butter, which is a very potent source of these vitamins.

While fatty fish and other fish oils have not as high a fat-soluble vitamin content as the fish liver oils, yet they contain much larger amounts of these vitamins than most other foods. The importance of the vitamin content of fatty fish can hardly be overestimated. In many countries where dairy products are high priced and vegetables are scarce, as in Alaska, Labrador and Iceland, all of the common foods are deficient in this vitamin with the exception of herring, mackerel and other fatty fish, which are eaten in great quantities.

In recent years a lack of iodine in food and drinking water has been recognized as one of the most important causes of endemic goiter, cretinism and other disorders of the thyroid gland. Thyroxin, the active principle of the thyroid, has been shown to be an iodine compound. Various scientists have demonstrated that it is necessary to have small amounts of iodine in the food or drinking water to enable the thyroid gland to function properly.

Recently the writer analyzed a large number of sea foods for their iodine content, using a novel method of analysis by which it was possible to measure accurately the iodine content of foods even when this element is present in amounts as small as one millionth of 1 per cent.

This investigation has shown that oysters, clams and lobsters are unusually high in iodine, containing approximately two hundred times as much iodine as beefsteak. Shrimp contains about one hundred times as much iodine as beefsteak, and crabs about half that amount. Marine fishes are also high in iodine, containing on the average fifty times as much iodine as milk or beef muscle. Fresh water fishes, however, are much lower in iodine, the amounts found being about the same as that of meat.

These findings show the value of fish and shell fish in the dietary of the inhabitants of regions where goiter is endemic. The Japanese eat more fish per capita than any other large nation. Perhaps for this reason goiter is unknown in Japan. In the goiterous belts of America sea foods should be eaten at least two or three times each week.

Japanese chemists have carried out many investigations into the character of the amino acids of fish proteins. Our digestive apparatus breaks down the proteins of our food into these amino acids which are used by the blood in building up our tissues.

While fish itself may not be considered as a "brain food," fish eggs, or fish roe, as they are ordinarily called, have a claim to that distinction. For the roe contains certain substances called phospholipins which resemble fats in some ways and which are found in the tissue of the brain. Doubtless these organic phosphorus compounds are used by the body in building up "gray matter."

Both the fat and protein constituents of fish are easily digested. While certain persons may not be able to readily digest certain fish fats, yet it has been demonstrated that the great majority of persons digest fish fats as easily as any other fats. The proteins of fish are as readily digested as those of beefsteak and most other meats.

—*Exchange.*

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## Milk the Master Builder

Milk is an excellent protein food. It is the master builder, containing the best material for growth as well as all the other substances needed in the body. Its protein is of the best quality, several times better than that of any other food, being a complete protein and easily used by the body.

Milk is in itself quite a complete food. It contains, besides protein, sugar and fat for making heat and energy. It also contains valuable mineral salts, so essential to the building of bones and for keeping the body in health. A quart of milk holds more lime than a quart of saturated limewater. It also contains phosphorus and a little iron.



And further, it is rich in the vitamins so necessary to promote growth and maintain health.

Children up to the age of ten or twelve should have a quart of milk each day. Adults ought to have a pint a day. These amounts may include the milk used in combination with other foods. When milk is used in combination with other foods, one is fairly certain of getting a balanced fare.

### A Word to the Wisecrackers

Bill Bulstrode is in bad condition, he has the itch and Spanish flu; but I am not a learned physician, so I don't tell him what to do. He comes and coughs around my dwelling, he rubs his back against my trees, but never does he hear me telling the way to cure a fell disease. If Bulstrode's harp were badly busted, so he could play no cheer-up airs, why then, no doubt, I might be trusted to tell him how to make repairs. For I know lyres from A to Izzard, I'm wise to all their flats and sharps; at fixing them I am a wizard, I have half-soled a thousand harps. And when a poet's lyre is broken, and he comes wailing to my door, no counsel do I leave unspoken, I talk for seven hours or more. But when a man has six diseases, including mumps and Spanish flu, I weep in pity when he sneezes, but do not tell him what to do. And Bulstrode often says, "By ginger, men's admonition drives me daft; I'm glad you are no cheap infringer upon the doctor's stately graft. You'll never know just what a jolt is, until you have diseases fell, and people say a flaxseed poultice upon your neck will make you well." "Let every man pursue his calling," I say to Bulstrode; "that is wise; oh, let the teamster do the hauling, the baker manufacture pies; and let the doc heal those who suffer, his mind is keen, his science sure; I'd only make your pain the tougher by telling you a certain cure."—*Walt Mason*.



## FUTURE EVENTS

The annual meeting of the MONTANA STATE BOARD OF DENTAL EXAMINERS will be held at Helena, Montana, July 13-17, 1925.

DR. MARSHALL E. GATES, *Secretary*,  
Helena, Montana.

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The next regular meeting of the NORTH DAKOTA STATE BOARD OF DENTAL EXAMINERS will be held in Fargo, Tuesday, July 14, 1925. All applications must be filed with secretary ten days before the beginning of the examination. For application blanks and further information write the secretary.

W. E. HOCKING, *Secretary*,  
Devils Lake, North Dakota.

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The Seventh Annual Meeting of the AMERICAN SOCIETY OF ORAL SURGEONS AND EXODONTISTS will be held at the Brown Hotel in Louisville, Kentucky, on September 18 and 19, 1925, the Friday and Saturday preceding the meeting of the American Dental Association.

EARLE H. THOMAS, *Secretary*,  
30 North Michigan Avenue, Chicago.

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The first biennial meeting of the AMERICAN DENTAL HYGIENISTS' ASSOCIATION will be held in conjunction with the American Dental Association meeting, in Louisville, Kentucky, during the week of September 21st, 1925.

All dental hygienists are cordially invited to attend. Interesting sessions and exhibits are being planned.

ELMA W. PLATT, *General Secretary*,  
910 30th Street, Sacramento, California.

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THE AMERICAN DENTAL ASSISTANTS ASSOCIATION will hold its next annual meeting at Louisville, Kentucky, September 21-25, 1925. General headquarters will be at the Hotel Seelbach. All dental assistants are cordially invited to attend. Special clinics covering the work of dental assistants will be presented, as well as papers and essays by dental assistants. A dental assistants' luncheon will be a part of the activities.

JULIETTE A. SOUTHARD, *President*,  
174 West 96th Street,  
New York City.

ANNA H. SYKORA, *General Secretary*,  
Suite 1702, 110 West 40th Street,  
New York City.